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ORIGINAL COMMUNICATIONS.

ARTICLE 1.—*Case of Biliary Calculi, complicated with disease of the Heart.* By IRA MANLEY, Jr., of Markesan, Marquette County, Wisconsin.

Oct. 30th, 1849.—Was summoned to visit Miss H. S., aged 24. Found her complaining of a violent pain under the edge of the ribs of the right side and also at the epigastrium, attended with vomiting.

From the history of the patient I learned that she had previously been similarly affected, the attacks occurring at intervals of about a month. She had formerly resided in Illinois where Ague and Fever were very common, she had suffered from Bilious Fever. Aside from the periodicity of the attacks, there was no symptom of uterine derangement. The pain in the side and vomiting did not occur at the menstrual period. The menses, with a single exception, occured quite regularly during the time of my acquaintance with the patient.

There was no excitement of the pulse, the papillæ on the tongue were raised and red, edges of the tongue red. Prescribed morphine, with sinapisms externally. Patient continued to vomit until a large quantity of bile was discharged.

Nov. 28.—Was called again and found a similar set of symptoms; taking the hint from the first occasion I gave Ipecacuan. to promote emesis, bile was rapidly discharged, and a full dose of morphine soon quieted the difficulty.

In the interval, prescribed Quinine, Strychnine, Fowler's solution, &c. The appetite was generally good and, aside from a dragging sensation and a tenderness in the right hypochondrium, she was tolerably comfortable.

She passed the interval for Dec. comfortably—1850. Jan. 8, found her suffering with an aggravation of all the old set of symptoms and in addition suppression of menses and a violent bronchitis; on the 16th she was convalescent, with return of the menses.

She had no other violent attack during the winter or spring. This exception we attributed principally to a frequent use of the comp. cathartic pill, with counter irritation. Still the side was troublesome. To my mind the precise pathological condition of the liver was not very clear, therefore I advised her to visit Chicago and get advice from Prof. Herrick. To him I wrote that I supposed from the tenderness, dragging, produced by motion, that the investing membrane or ligaments were the points implicated.

He prescribed Strychnine in solution with Sul. Acid, also Oleum Jec. Asselli, and externally, the Nitro Nur. Acid, Bath. She improved under his treatment. In May, 1851, she married, from which time till October she had but few returns of the vomiting.

Oct. 11.—Found her coughing and expectorating frothy mucus tinged with blood. Knowing that except occasional bronchital irritation her lungs were quite healthy, I at once suspected the heart to be in trouble. Physical signs soon proved to me that the right side of the heart had enlarged by thining of its walls.—A recurrence of the vomiting together with palpitation of the heart soon became very distressing. While waiting for Cyanuret of Potass. for which we immediately sent, we used the cold bathing; this gave partial relief, but after a few trials ceased to give any whatever. The Pruss. Acid was more useful, as for almost a year it was the only agent except chloroform which was reliable to quiet the action of the heart, and at the same time allay the irritability of the stomach. During the repeated attacks she suf-

fered the following winter, nothing answered so well to quiet the anguish, which was intense.

During the summer of 1852 she again visited Chicago. In addition to my diagnosis, Prof. Herrick diagnosed granulations of the edges of the valves. He gave her no hope. It was he who gave her chloroform. This was principally to allay the suffering occasioned by distention of the different cavities. Edœma showed itself first in the lower extremity, from which general anasarca ensued, and when the Prof. saw her, the thorax and abdomen were filling up with effused fluid. I should not have ventured the chloroform on account of the heart disease, but when she returned I gave it to her in large quantities, after all medicine given by the mouth was rejected; the effect for the time was very grateful to the patient. He also prescribed Citrate of Potass. with an excess of Citric acid. This for a while produced rapid absorbtion of the effused fluids, but like all other remedies it ceased to benefit. She filled up again, and died in November.

Autopsy. J. Chapel, Esq., present.

Raised the Sternum, Lungs appear about one half collapsed, fluid occupying their place, Lungs somewhat congested, some adhesions of the left Lung, no tubercle. Pericardium contains about 6 oz. serum. Cava greatly dilated, right auricle about the size of a man's hand, closed walls extremely thin, musculi pectinati appeared very strong. Foramina hebesii normal.

The auriculo-venticular opening allows the passage of two fingers. The edges of the tricuspid were granulated and could not have been approximated, The granules were small. Right Ventricle greatly enlarged, depth five inches. Walls 4 lines three-eights inches thick. Carneæ columnæ much hypertrophied, Semilunar Valves of pulmonary artery healthy. Left Auricle nearly normal, Auriculo-Venticular orifice will not admit the end of the little finger. Mitral Valves granulated, similar to the tricuspid. One of the Semilunar valves of Aorta slightly granulated No trace of ossification. Heart weighed 25 oz.

Liver weighed 4 lbs. 2 oz. Left lobe firmly attached to the spleen. From its mottled appearance, judged this lobe had suffered congestion.

The walls of the gall-bladder were much thickened, the fundus

and neck each contained a *concretion*, something larger than a rifle ball. The body of the bladder formed an hour glass contraction.

The duct barely allowed the passage of a probe, showing that no concretion had passed; there was in the cyst, but a small quantity of mucus.

The uterus and its appendages appeared normal. The cavity of the abdomen contained a large quantity of fluid.

It was observed throughout her long course of bad health that acids were better borne and more servicable to quiet the stomach than any other form of medication.

Had the contracted condition of the left auriculo-ventricular orifice anything to do with the production of this diseased heart? If so, should the left auricle have suffered as well as the right?

Prof. H. says there was no disease of the heart in 1850, and I am of the same opinion; but there was effusion at that time. Did this effusion originate in the liver? what effect had it in the production of the heart disease? or had the frequent vomiting for so great length of time any agency in the matter?

ART. II.—*Reports of Cases.* By THOS HALL, M.D. Read before the Illinois State Med. Society, June, 1853.

THE first disorder of any consequence in Stark County after our annual meeting in last June, was mucous diarrhœa. It appeared in the same places and was characterized by the same appearances as the diarrhœa which preceded the dysentery of the past year. *Quinine*, which quickly and invariably cured the disorder in that year, produced no benefit in this. Turpentine, which has long been with me a favorite remedy in this form of diarrhœa, quickly checked and in a short time cured every case, although in the preceding year it produced little or no real benefit.

This disorder, as in the preceding year, was followed by dysentery, the cases limited in number and trifling in character compared with the previous epidemic. There was one feature in the cases worthy of note. The disease was located, in every instance, in the lowest portion of the colon or upper portion of the rectum—that is as

near as we can judge on external examination—whereas in the preceding year it was as invariably seated in the left side of the arch, or upper portion of the descending colon. I commenced the treatment with the same remedies that I had found so efficacious before, as mentioned in my portion of the report on practical medicine, read at our last meeting, but without the least appreciable benefit. I confess having been disappointed; recollecting, however, that the treatment which was successful in controlling the diarrhœa of the past year, was with but slight modification equally successful in arresting the subsequent dysentery, Turpentine and opium were given with the happiest effect in every case, save two, and these yielded at once to iodide injections, which treatment I saw strongly recommended in some of the journals at the time they were under treatment. I had previously used acetate of lead in cold water, and turpentine in mucilage without any benefit. In one case the change was immediate, and one injection only was used in both, the patients expressing themselves as feeling much easier directly after its use. I tried it in a sporadic case some time afterwards, with the same happy result—on the whole I regarded this injection as being the best yet used in the treatment of this troublesome disease, and especially when it is so low in the bowels, that it can be safely, easily, and certainly reached.

Immediately following the dysentery came typhoid fever, which was more fatal than any other disease during our medical year. As everything connected with this disease must be interesting to the profession, I shall devote more space to it; at the same time I would urge on my professional brethren, when they have the opportunity, to observe it closely and, discarding all written opinions, endeavor to ascertain its cause; for until we can determine this matter, our practice will be as diversified as the various theories that are now held respecting its origin and nature. So far as I saw, and so far as I have made inquiry, there has been no fever in our section, except in houses under which there was a cellar, and food more or less kept in the cellar. In 1851 the cellars were generally filled with water from the excessive rains. In 1852, they were unusually damp, and I formed an opinion, whether right or wrong time alone will determine, that typhoid fever is caused by a something that passes through,

or at least into the intestinal canal, and that in tainted food. This opinion I now hold, and shall certainly not give it up for the one last printed in the Chicago Med. Journal, "that hitherto remittent and continued fever (including typhus, typhoid, yellow fever, &c.,) have a common origin," for to me it appears there is and can be no more relationship existing betwixt typhoid and the other fevers, than betwixt a mild case of small pox and a severe case of itch. In past years, I had succeeded as well as any of my brethren in this form of fever, and my treatment had been as little medicine as possible, so that every obstacle to a favorable termination was removed, and unfavorable symptoms, as they arose, combated. The only remedy that I constantly used, and can unhesitatingly recommend in every form of low fever, was Hope, and this I gave in no sparing quantity. But, truthfully speaking, no course of medical treatment has been perfectly satisfactory to my mind—we have as yet no sure guide for unerring safe practice. The first cases of typhoid fever were in my own family—three were apparently impressed at the same time, at least they commenced complaining on the same morning; they ran the usual course under the usual treatment, and recovered—sick from twenty-four to thirty days; no alarming symptoms, except in one case. As I found turpentine the best remedy, when ulceration was threatening or had actually commenced, I determined, that should any more cases occur in my family, I would try its power in preventing ulceration of the intestines and intestinal and mesenteric glands, and give it from the beginning. The opportunity was soon afforded in a daughter of eight years old. I amused her with cold water and homœopathic treatment until there was unmistakable evidence of the disease.

The discharges from the bowels are, if carefully examined, sufficiently diagnostic. Their odor is peculiar, and if they are allowed to stand, there is a sediment that I cannot well describe, but beneath the general dark color of the fæces there is deposited something like dirty yellow and green paint. As soon as these characters were perceptible, I gave her ten drops of turpentine and three of laudanum, every four hours; in twelve hours there was visible improvement in her countenance, tongue, and character, and frequency of the intestinal discharges.

She took nothing except the above during her attack; the opium was omitted according to circumstances. Not a single symptom occurred, during the disease, creating any alarm, and yet its duration, from first complaining to anything like rapid convalescence, was twenty-two days. When awake, her mind was always clear; the appetite never entirely destroyed; her bowels acted from twice to four times in twenty-fours hours, but of no bad odor or color after the first day of taking the turpentine. In this, as in every case, whether mild or severe, male or female, the head became all but bald during convalescence.

The next case in which I tried the turpentine and opium, was in a young man, of 23 years. He first felt indisposed on a Saturday; I saw him on Monday and suspected the disorder, but amused him during the day with a semblance of medical treatment. The next morning at five o'clock, the fæces were typhoid, and were discharged every two or three hours in considerable quantity. I mixed two parts of turpentine with one of laudanum, and ordered thirty drops every four hours until I saw him again. I visited him a little after nine at night, and the change in his countenance for the better was very visible; his tongue was moist and almost clean. and his bowels had acted but once. Surprised somewhat at his improved condition, I was calculating the number of doses he had taken, when his nurse said "15, you ordered his medicine every hour and I have been very regular in giving it." I suspended the treatment until next day, and gave it three times in the twenty-four hours, lessening the quantity of laudanum and increasing that of the turpentine. On the eleventh day from his feeling indisposed I found him at the breakfast table with about a quarter of a healthy appetite, and he regularly rose to his meals afterward; but he did not appear to advance in his recovery from the eleventh to somewhere about the twenty-first day, and then convalescence was rapid; diarrhœa during this interval would threaten to return if the medicine was omitted for a whole day.

These two are a fair sample of all the cases treated with turpentine from the commencement; it certainly prevented the tendency to glandular disorganization, and, compared with the cases reported by Jenner, shortened their duration by some five or six days. For

nourishment, I gave regularly Liebig's beef tea, and any gruel that the taste or caprice of the patient might crave.

In conclusion, I will merely observe that in no cases where this treatment was commenced by the fourth or fifth day did any alarming symptoms show themselves. Everything moved on with pleasure and satisfaction to myself, and with such safety and comparative comfort to the patients as to justify me in bringing the matter before the profession.

Puerperal fever has been rife, and I believe invariably fatal, in Stark and neighboring Counties. No treatment appeared to be of any real benefit. In one case where the suffering was unusually severe, I abstracted about 12 ounces of blood, the pain was not only materially lessened, but—cut short by at least some eight or ten hours. I should hesitate to recommend it in any case of epidemic puerperal peritonitis.

During the prevalence of this disease, there was scarcely a woman who had not much more than ordinary tenderness about the womb, accompanied with a greater or less degree of febrile disturbance. I refer to these cases principally to call the attention of the juniors to a symptom, if it may be so termed, of fearful import, which was present in every instance—an impression on the mind, in the earliest months of pregnancy, that they should die before or at the period of child-birth; an impression that no argument could remove, and it was useless trying to lessen their despondency by the administration of hope. The prognostic value of this symptom has not been noticed by our systematic writers in the way that its importance demands.

According to my experience, (and in this *one* respect it extends over 40 years,) an impression of a fatal termination firmly fixed on the mind of a patient, during the incubation of disease, is a certain sign that it is incurable, and when fully developed, as a general rule rapidly fatal.

ART. III.—*Stomatitis Materni.* By ALFRED S. CASTLEMAN, M.D., Delafield, Wisconsin.

IN the April No. of the "Journal," Dr. D. Hutchinson, at the close of a valuable article on stomatitis materni, requests that some

member of the profession, accustomed to chemical manipulation, will analyze the blood and urine in this disease, and give the results of his analysis to the profession. I hope he may find a ready response to the call, and pending the operation, I beg leave to suggest to the profession an analysis of the "appreciable symptoms" of the disease, with a view to the question: "Has this disease ever existed when the symptoms of *general* disorder were not accompanied by it, traceable to either retention or suppression of bile?" In the last 15 years I have not found it necessary to take the child from the breast, and my practice has been based on a negative answer to this question. I have witnessed two post. obit. examinations of patients, who labored, at time of death, under this disease, in each the gall-bladder and duct were clogged with calculi and thickened bile. In the living patients I have observed, in almost every instance, 1st, an anemic condition; 2d, acidity of stomach; 3d, as a consequence of the last, urinary deposits, *invariably relieved by the free use of alkalies*; 4th, the alvine evacuations either hard or black, denoting the absence of the natural and accustomed stimulus to the bowels, or clay, colored with a tendency to diarrhœa, showing both a want of biliary presence, and the existence of fermentations, which never (I think) occurs when the proper proportion of bile is present.

The presence of anæmia I have not found necessary to the existence of the disease, but if present, it greatly adds to the chances of continuance. Indeed, it often produces the very state of things, on which, I think, the disease depends. In an anæmic condition it is difficult for the system to perform all of its *usual* functions, and at the same time support the new one now set up—the support of the infant, either in embryo or by lactation. For this support a *new* draft is made upon the energies of the system, and this draft is often made upon some *one* organ, instead of being distributed equally on the whole; that one must, of course, loose much of its energy; and, should it be the liver, we have want of its secretion; as a consequence, we have fermentation and acidity of stomach and bowels with its sequents, amongst which is ulceration of certain of the mucous membranes; and, to the existence of this condition of the membranes, neither pregnancy nor lactation are *necessary*, as it will be found under many circumstances in the absence of

both these, though *never* under my observation without the previous withdrawal of the accustomed supply of bile. The only difference to be found in the disease under these different circumstances is, that during lactation or pregnancy it is more obstinate in consequence of the draft upon the energies of the system being continuous, and consequently renewing the disease as often as the remedies for its relief are withheld, or until the vital energies are increased by tonics, or otherwise sufficiently to meet the new demand without the special draft.

Will your readers and correspondents examine their note books, and inform us how far their observations accord with those here expressed?

ART. IV.—*A Simple Arrangement of a Fracture Box for the Leg.* By PHILIP KIRWAN, M. D.

THE box is composed of two sides, a bottom, and foot board, made of inch pine lumber, and nailed or screwed solid together, and forming an inclined plane. Also a bed for the leg to rest on, made of thin but strong cotton factory cloth; which bed, with its appendages, might be said to be the only part new in the arrangement.

Dimensions.—The box I am about to describe will answer for legs of different sizes, and for both right or left, by a little manipulation, &c. The box is six inches deep, seven inches wide at one end, and four at the other; the length in the clear may be twenty to twenty-four inches from the foot board to the angle at the knee; the thigh portion, ten inches; the foot board may be ten or twelve inches long, and set obliquely forward; the sides are rounded on the upper edges; the inclination does not exceed three inches. The strip of cloth for the bed should be of such dimensions, that when one edge of the cloth is tacked with small tacks, along the upper and outer edge of the side of the box next the sound leg, and the other edge laps about an inch over the opposite side, the leg may sink in the box to within about an inch of the bottom. Both edges of the bed ought to be hemmed before being tacked, and pieces of strong tape, nine or ten inches long, sewed to the free edge of the bed or cloth, at a distance of about three

inches apart, to be twined around small pegs or screws to be inserted along the under edge of the side of the box about half an inch up from the bottom edge, and at corresponding distances with the pieces of tape spoken of. The object of the tapes and pegs or screws is to support the bed on which the leg is placed, at a desired distance from the bottom of the box, and thereby admit the air to circulate freely about the leg, and also to relieve pressure of the leg or thigh at any part, by relaxing a tape opposite to the pressure, &c.

It may be asked, can extension be made if required? I answer it can, by a little ingenuity on the part of the physician.

I have tested the above described box, and am led to believe that it possesses two or three important advantages to the patient. 1st. The facility with which pressure on any part of the leg or thigh can be relieved, without the least disturbance to the leg. 2d. The free access of air admitted around the leg, and thereby preventing no small amount of heat, swelling, and, consequently, pain. 3d. The evenness of the bed on which the leg rests, affording much ease, and but little occasion to relieve pressure of the leg. The leg may be made immovable in the box, if desired, with cotton batting, &c., and a roller around the box and leg.

Translated from the French for the N. W. Med. and Surg Journal.

ART. V.—*The Employment of Digitaline in Spormatorrhœa.* By M. LUCIEN CORVISART.

M. L. CORVISART, having had the boldness to introduce the use of digitaline in spormatorrhœa, has already used it three times and each time with success. Without pretending to claim from the observations already made, the conviction of practitioners, he thinks, and justly, as it seems to us, that this medicine deserves attention.

We have here the first case in which he thought he perceived benefit from the use of digitaline in seminal flux.

CASE I.—P. M., aged 20 years, a stamper, entered the Hotel-Dieu the 1st of Feb. 1848, in the ward Saint Agnes, under the care of Professor Chomel.—Appearance feeble, pale, observing during the week strict continence, but every Sunday for more than a year

entering into the lowest debauchery and repeating coition five or six times, digestion bad, anorexia, palpitation of the heart, face bloated and hot, dizziness, tingling of the ears, accasional attacks of dyspnœa compelling the patient to walk his room during the night, disturbed dreams, and strange noises during partial sleep. The above symptoms had supervened since November last, at which time, after a debauch, he experienced a severe pain in the precordial region, characteristic of endo-carditcs, for which he was subjected at the Hotel-Dieu to a strictly antiphlogistic treatment, (three bleedings, &c.) The patient, being unable to continue his labors, has now returned. The volume of the heart is normal; the blow of the point against the walls of the chest with a *bruit de souffle*, somewhat dry at the first sound of the heart. M. Chomel prescribed first 1, then 2 milligrammes of digitaline.

The sixth day of the treatment, the palpitations having very much diminished, the patient mentioned that since November he had almost every night involuntary pollutions, often leaving no trace in his memory—they were known only by the stains on his linen. When awakened by the pollutions, the penis was found to be in erection, as was also the case each morning.

Pollutions take place almost every day, under the influence of erotic ideas, or the simple friction of the clothes, with erection and ejaculation, but without lively pleasure; they sometimes occur during defecation.

The patient, for three months, has not seen a woman.

He is astonished that the emissions have not occurred for the last three days, (now the ninth since entering the hospital, and the third of the treatment of the palpitations by digitaline.)

Feb. 13th, one pollution without any remembrance of it; the 14th one on waking; the 15th one on waking, very slight, (one or two drops); 3 milligrammes were ordered; no spormatorrhœa from the 16 to to the 19th; then seven days entire without a single pollution, although each day the patient examined his shirt and drawers with the greatest care; this was also done several times by myself.

March 7th—One emission on waking.

March 12th—Discharged, no pollution since the last date.

After thirty eight days the patient had had but five pollutions, and

for twenty two days but one; he was still troubled with erections, although less than formerly. The palpitations were very much diminished.

Case II.—L. H., aged 18 years, sculptor, having never indulged in venereal excesses, was taken when between fifteen and sixteen years with nocturnal emission without pleasurable sensations. At first these accidents occurred almost every night from his sixteenth to his seventeenth year.

The young patient, very much affected, bound the penis with pack thread, bathed the parts in ice-cold water, avoided every occasion of provoking erotic ideas, and lived in the most absolute continence.

About the month of December, 1847, he commenced the practise of masturbation two or three times a week. During the two months in which he indulged in this habit, the nocturnal pollutions disappeared almost entirely; nevertheless the symptoms, which had already begun to manifest themselves, increased. The strength was diminished, the spirits depressed, the memory short, the patient became very sensible to cold, digestion slow and painful, the appetite greedy. About the end of Feb. 1848, the patient abandoned his practices and renounced all venereal pleasures. A few days after the nocturnal emissions returned as frequently as before. The erections when the patient was awakened, (which was rarely the case,) were but slight; they were not always accompanied by erotic ideas, but sometimes even the reverse.

L. H. remarked that for some weeks, about the close of micturition, the urine was loaded with a white albuminous cloud, which sunk to the bottom of the vessel, and was more abundant in the morning after fatigue.

The patient experienced pain along the spinal column, shooting into the epigastric region and a general, although light, habitual trembling with stammering.

The patient had used, without success, camphor, internally and externally; he thought the erections more numerous, and the emissions more frequent. M. Huguier had prescribed, about the end of March, bitter drinks, the syrup of gentian, exercise, &c., The pollutions diminished during one or two weeks and then returned.

On the 13th of April the patient came to consult M. Huguier, who at my request had the goodness to prescribe the digitaline, 3 milligr. a day. Each of the three following days the pollutions persisted, then an interval of six days without any. The 23d of April he returned to know whether he should continue the use of the digitaline. M. Huguier admitted him to his wards in the hospital Beaujon, in order the better to observe the case. The seventeenth day of the treatment, which was continued, he had one pollution, that was all. The patient was discharged the 15th of May, having had in thirty-four days but five pollutions, of which the two last were separated by an interval of twenty-two days. There was no seminal discharge in the urine, that fluid being scarcely troubled and containing no spermatic animalcula. He had neither trembling nor stammering; he was free from pain along the spine; his strength improving, and his digestion good.

The third case is too lengthy to present entire, but it is not less conclusive than the others.

How shall the action of digitaline be explained? The first patient appears to be an example of spermatorrhœa from atony of the genital organs, this was the case also in the third, but certainly not in the second, who appears to have possessed remarkable temperance. In two of the cases the erections were light, not insupportable. It is not by calming these, then, that the remedy acts. So far, its administration is purely empirical, but this is not sufficient reason for disregarding it.

Translated from the French for the N. W. Med. and Surg. Journal.

ART. VI.—*On the use of Ergot in certain Cases of Retention of Urine.* By M. PASSOT, of Lyons.

ERGOT possesses not only the property of exciting contractions of the uterus in cases of inertia of that organ, but is also useful in cases of retention of urine, depending on atony and paralysis of the bladder.

M. M. Baudin and Payan (of Aix) are the first who have endeavored to demonstrate that this drug does not act exclusively on the uterus, but on the inferior portion of the spinal cord. It was this that led them to its use in the affection of which we are speaking, and also in feebleness and paralysis of the inferior extremities.

Drs. Kinsley, Canuto-Canuti, Sainmont of Rocroy, and Allier of Marcigny have all presented facts, affording the strongest testimony to the utility of ergot in paralysis of the bladder. I shall present an analysis of a few cases.

Captain B., aged 60 years, had suffered from dysuria, gradually increasing for three months, when it suddenly changed to complete retention, rendering necessary the use of the catheter several times each day. During two months he was subjected to almost every variety of treatment, without the least amelioration. The prostate was enlarged, and the patient suffered severely from the introduction of the catheter, which had to be used twice each day.

50 centigrammes (gr. vijss) in a spoonful of boiling water were administered three times daily.

After about 6 hours a little urine passed and the catheter was employed but once during the day; then an interval of forty eight hours, and after six days the bladder had recovered its power.—(*Kinsley Jour. des Conn. Medico-Chir., March*, 1844.)

A lady, aged about 75 years, was attacked with paralysis of the bladder, which for a long time required the use of the catheter. 16 decigrammes (gr. xxjv.) of ergot in infusion were administered. On the sixth day of the treatment the catheter was no longer necessary, the patient being able to pass her urine freely.—(*Canuto-Canuti. Bull. des Scienc. de Bologne*, 1845.)

R., aged 58 years, of a nervous temperament, was taken, after a violent attack of cholera, with complete retention of urine, so that it was necessary to relieve the bladder by the use of the catheter. The inertia of the organ continued in spite of cold injections into its interior, cold baths, the application of ice and even a blister over the hypogastric region. Strychnine ointment applied to the blistered surface, and frictions to the groins produced the next morning cramps in the legs and arms, and soon after a stiffness of the neck, which rendered it necessary to discontinue the medicine without, as yet, any action on the bladder.

At this juncture the author conceived the idea of giving ergot. He placed six *grammes*, coarsely powdered, in one *litre* of water, allowed it to stand two days, and then threw into the bladder a cold injection of this liquid. Seven minutes afterwards the patient

expressed a desire to pass his urine, which, nevertheless, he was unable to do satisfactorily during the day. The next morning the injection was repeated; in eight minutes there was a desire followed by a spontaneous flow of urine. The injections were continued several days; the cure was complete.—(*Sainmont, Gazette des Hopitaux*, 1848.)

In 1848, Dr. Allier, of Marcigny, communicated to the National Academy of Medicine, a letter, in which he expresses the belief—the result of his observations—that in vessical paralysis the ergot will fail only one time in four. I possess also several facts to prove, in an incontestable manner, that ergot has the power to restore to the bladder its contractility.

The following is remarkable In the month of July, 1846, I was consulted by M. H., aged 60 years, a feeble constitution and a very nervous temperament.

M H. acknowledged that he had indulged in venereal excesses, to which, as a cause, he refers the paralysis of the bladder, now existing five months, and requiring twice daily the use of the catheter. There exists no organic lesion, no fever, little or no enlargement of the prostate, the urethra is free throughout its whole course, and the urine normal in quality.

After having tried, without success, frictions with tr. cantharides, and blisters to the hypogastric region, I prescribed 2 grammes of ergot recently pulverized, in 120 grammes of the *potion gommeuse* (a mixture of g. Arab., simple syrup, and water of orange flowers,) a soup spoonful to be taken every half hour, shaking the mixture each time; also the following:—

℞ Ergot pulv.	15 decigr.,
Butter of Cacao,	q. s.,
M. ft. suppos, M.	ij,

Introduce morning and evening.

The same day, but a few hours after commencing the ergot, M. H. experienced a desire to pass his urine. At my visit in the evening, I prescribed a bath; scarcely had the patient commenced bathing than micturition took place, and with force. From this time till his death the urine was free, and without the aid of a bougie. I should remark, that to complete the cure, I continued the ergot for three or four days in diminished doses.

The patient died Jan. 30th, 1848, of pleuro-pneumonia, during the course of which there was not the least symptom of a morbid condition of the bladder.

It seems, then, to be established, that ergot will cure very well retention of urine depending on atony, or pure and simple paralysis of the bladder.

In regard to paralysis following apoplexy, or dependent upon affections of the nervous centers, it is known to be difficult to cure by any medical agent whatever.

An Inquiry, Critical and Experimental, into the Pathology of Fever. By N. S. Davis M. D. Professor of Pathology, Practice of Medicine, and Clinical Medicine, in Rush Medical College; and one of the Physicians of the Ill. Gen. Hospital.

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In thirty minutes more the temperature was found the same, the pulse 72, and respiration 16, with a further diminution of natural feelings. The exhilaration in the head, had now become converted into a sensation of tightness and dull pain. At each time of noting the temperature, pulse &c., a given quantity of *expired* air was collected and the quantity of carbonic acid in it ascertained. During the first hour after taking the brandy, the relative proportion of carbonic acid exhaled, underwent a rapid and marked diminution. At the end of two and a half hours, it was fully equal to the proportion before the experiment began. In all the examinations of temperature, the bulb of the thermometer was inserted under the tongue, with the mouth closed around it for ten minutes, and the height of the mercury noted by a careful assistant before its removal.

Experiment 2.—Nov. 8., 1852, 9 o'clock P. M., in the same room, with the temperature, regulated in the same *manner* as in experiment number 1. Three hours after a light supper, my temperature under the tongue was 97¾ F., pulse 72, and respirations 18 per minute. I drank at once 8 *ounces of good* old Port Wine. In *thirty* minutes after drinking the wine, my temperature was 97⅞ F., pulse 78, respirations 19.

Ten o'clock P. M., one hour after taking the wine, feel much exhilaration of mind and brain, eyes hot, mouth and fauces dry, a sense of numbness in the hands, face and throat; muscular weakness or a feeling as though I should stagger without an effort to prevent it. Temperature 97⅞° F., pulse 77, and respiration 19.

Eleven o'clock, two hours after the wine, same unnatural feelings continue, with more approach towards head-ache and a sense of dullness and tightness above the ears. Temperature 97⅛° F., pulse, 73, and respiration 19.

Twelve o'clock, three hours after the wine, mouth less dry, but a dry bad feeling in the throat, less exhilaration and more pain, with

heaviness in the head, and some general feeling of lassitude.—Temperature 97° F., pulse 68, and respiration 17.

The effect on the relative proportion of carbonic acid in the expired air was the same in this as in the preceding experiment. In both experiments other qualities of the pulse besides mere frequency, were carefully noted, and the gentleman who assisted me, thought that its fullness and firmness was diminished in pretty close proportion to its increase in frequency. The excretory evacuations were also noted carefully during the 24 hours following each experiment, but no change was observable, except a slight diminution in the quantity, with a deeper red color, of the urine. Its specific gravity and chemical composition were not examined.

These experiments present us with two distinct and very interesting classes of phenomena. The first embraces the sense of exhilaration in the brain, the general feeling of heat and numbness, and the increased frequency of the pulse; and arise evidently from the direct irritating effects of the alcohol on the nerve structures and the inner surface of the heart and arteries. The second class includes the marked diminution of animal heat; the diminished secretion from the mouth, fauces, and all other secreting structures; and the muscular weakness or diminished power of endurance.

These phenomena, existing conjointly, can only arise from such a modification of the inherent vital properties of the tissues, as to retard their metamorphosis from which carbonic acid is furnished for expiration, caloric evolved for maintaining animal temperature, and the capillary and interstitial circulation maintained in a state favorable for secretion. And the fact that all these elementary organic actions or functions are *depressed*, at the same moment that the brain and nervous system are unequivocally *excited*, affords proof amounting to scarcely less than absolute demonstration, that these functions depend essentially on inherent vital properties, capable of existence and modification. wholly independent of the brain or nerves. If it were otherwise, every excitement or exhilaration of the nervous functions, would necessarily be accompanied by corresponding excitement or increase of calorification, secretion, &c. Equally do the foregoing results demonstrate the fact, that alcoholic drinks taken into the human system, neither support res-

piration nor animal heat, as represented by Liebig, Carpenter and other chemico-physiologists. On the contrary, they show very clearly that the presence of alcohol in the blood directly excites the nervous tissues and the inner surface of the heart and arteries, inducing mental and nervous exhilaration, temporary excitement of the pulse, and a general glow of heat; while at the same time it so acts on the organic susceptibility and tonicity, or rather molecular affinity, as to suspend or retard those molecular changes by which the tissues undergo metamorphosis, the secretory cells effect their functions, and animal heat is maintained. Hence, when the quantity of alcohol introduced into the human system is too great, its depressing influence on the organic susceptibility so far predominates, that even the nervous tissue fails longer to respond to the presence of the excitement, and the individual becomes wholly unconscious or "*dead drunk*," and sometimes even dies. Whether it produces this direct influence on the the vital properties and organic functions by its strong affinity for the albuminous matter of the tissues, or in some other way, is not material to our present object. The two-fold effects of alcoholic drinks, as above explained, affords a beautiful physiological explanation of their common and almost irresistible influence over the minds and bodies of men.—The first is fascinated and controlled by their exhilarating influence on the brain and nerves; while the second is slowly but certainly impaired in all its functions, by their direct interference with the vital properties and organic actions. Thus, if the quantity taken habitually be small, and especially if it consist of the more dilute beverages, such as wine, porter, beer, &c., it will generally serve simply to retard the metamorphosis or disintegration of the tissues, without materially impairing the processes of assimilation and nutrition, and thereby lead to an accumulation of fat or the adipose tissue, with diminished tonicity and power of endurance. This gives to the individual that *embonpoint*, or fulness of person, redness of face, and indisposition to active physical exertion, which is too frequently seen in all the stages of its development in every part of Christendom. On the other hand, if the quantity taken is large, consisting chiefly of distilled spirits, it sooner or later induces a more profound alteration of the elementary functions. It not only retards disintegration and lessens the proper depuration

of the blood by means of the excretory organs, but it also retards and deranges assimilation and nutrition, thereby inducing the same redness and bloating of face, the same impaired condition of vital properties and physical power of endurance, but without any of the *embonpoint*; and sometimes with positive emaciation. The same properties that gives to alcohol the power to exert such influences over the healthy condition of the system, render it a valuable medical agent in certain pathological conditions, characterized by a rapid or excessive disintegration of tisssues and a torpid state of the nervous system. Such a condition is occasionally seen in the advanced stages of tubercular phthisis, and in some of the cases of continued fever.

But in *no case*, do the alcoholic drinks act on the healthy condition of the human system as true *tonics*, by promoting the physical strength, energy, and power of endurance.

The effects of morbific agents, furnish many illustrations of the power to act on the primary properties of the tissues, ihdependent of the nervous system. Thus, while the efficient cause of epidemic cholera leaves the brain and nerves so little disturbed, that all the functions of the mind, with ordinary sensation and motion, continue scarcely impaired; so profound is the depression of organic susceptibility throughout the entire body, that in one brief hour after its work has fairly begun, all nutrition and glandular secretions have ceased; neither the secreting cells nor capillaries respond to the presence of blood in them; the irritability and contractility of the heart itself rapidly diminishes, and the production of animal heat is entirely suspended. That these effects are not the results of excessive evacuations, is proved by the fact that some of the cases in which they occur most rapidly and fatally, are characterized by very little evacuations of any kind.

Regarding these illustrations as sufficient to show that the organic properties are capable of being acted upon by external agents, and that, too, in such a manner as to produce *general* functional disturbance throughout the whole system, it remains to answer the second leading inquiry proposed, viz., whether all the essential phenomena of the different types of fever can be satisfactorily explained, by a knowledge of the effects of different morbific causes

on the general vital properties of organized tissues? In answering this question, a few elementary physiological propositions need to be clearly apprehended, and constantly kept in mind.

First, every *vital* act or phenomenon requires for its exhibition three coincident conditions, namely, a definite texture or organization, a susceptability to the action of agents, and the presence of an agent capable of making an impression.

Second, for the exhibition of vital actions of a strictly healthy character, the three foregoing conditions must not only be present, but they must bear a just and proper relation to each other.

For instance, the germinal cells of the fecundated egg may possess the required organization or texture, and the proper susceptibility, but if the stimulus of caloric be not applied in the proper quantity, no healthy development or vital action takes place. On the other hand, if the texture of the germinal cells be changed, or their susceptibility destroyed, no amount of the stimulus of caloric will answer the required purpose. What is true of the simple primary cell, is equally true of the most complex tissues and organs of the human body. So long as every tissue and organ maintains its natural texture, its proper degree of susceptibility, and the presence of its natural stimulus in due proportion, so long will every function be performed with regularity, and health will be preserved. But let anything produce a variation in either of these conditions, and a variation in the functions is a necessary consequence. If anything destroys either, death follows. If the interfering cause is such that it acts only on the conditions or properties of a single tissue or organ, the resulting functional disorder is limited and local; if it acts on the whole at once, the functional disorder is general. But, as we shall soon see, many diseases which are primarily local, from the limited action of the cause, subsequently induce general disturbance from the continued interruption of the function of the part affected.

Third, the human body, regarded as a living physical organization, is composed of numerous tissues and organs, each possessed of a definite texture, and the common elementary property of susceptibility, and holding as its natural stimulant the healthy arterial blood.

While these all remain normal, each organ performs its own specific function with regularity. One group, or class, are employed in elaborating new material to supply the constant waste, which are called digestive and assimilative organs; another, in gathering up the waste, useless, and noxious particles and conveying them out of the system, called excretory organs; another is designed to form a bond of union between the whole, so that any impression of a deleterious nature, made on one part, may call into sympathetic relation all the others. This embraces the nervous system of organic life; while the rest of the nervous matter is connected with the functions of relation.

Fourth, if it is true that the healthy performance of the functions of all the tissues depends on the existence and proper relations of the *three* conditions named in the first proposition, then it legitimately follows that no *general* disease or functional derangement can take place, except through an alteration of one or more of these general conditions.

Such alterations may take place, first, by the direct action of morbid causes or agents on the tonicity and susceptibility of all the tissues; and, second, by changes effected in that universal organic stimulant, the blood; and through it, secondarily also, in the elementary properties of all the tissues in which it circulates. The first class of agents would include the mental emotions, and those imponderable agents, termed caloric, light and electricity; while the second would include all those material agents of a deleterious character, capable of entering the circulating fluid from without, or through the absorbent capillaries, from the metamorphosis of the tissues within, which were not capable of being speedily excreted from the system, on the one hand, or of having their action limited by some special affinity, to a single organ or a group of organs, on the other. It is thus readily perceived that the mutual and proper relation between the tonicity and susceptibility of the solids and the circulating fluid, may be universally disturbed by numerous and diverse agencies, giving rise to equally diverse morbid phenomena and results. For instance, the stronger mental emotions, such as fear, grief, and anxiety, directly impair the *tonicity* of all the tissues, as evidenced by the altered capillary

circulation and secretions, the muscular relaxation, the impaired nutrition, &c. These effects, if continued by the persistent action of the cause, sooner or later, induce such changes in the blood and the organic susceptibility as to destroy their natural relations to each other, when that general functional disturbance becomes developed, which constitutes a variety of fever. Again, it has already been stated that a continued exposure to a high temperature diminishes tonicity and increases susceptibility, which, though not generally sufficient of itself to produce the phenomena of active disease, is yet sufficient to constitute that predisposition which is well known to exist during the hot months of the year, and to give rise, on the intervention of exciting causes, to those rapid local determinations which constitute cholera morbus, diarrhœa, dysentery, &c.; or those more general diseases of high irritative excitement, such as the various forms of periodic fevers in malarious districts, and the more active forms of continued fever in other localities. On the other hand, the effects of exposure to a low temperature, in increasing tonicity and diminishing susceptibility, is equally apparent to every observer. At first the condensation of tissues or increased tone that accompanies exposure to a low temperature, imparts a feeling of increased strength and energy; but if the exposure is continued, this soon gives place to stiffness or indisposition to active exertion, and a blunted or obtuse state of all the susceptibilities of the system, accompanied by diminished force in both respiration and circulation. While the organic susceptibility is thus blunted by the direct influence of cold, the molecular changes, by which new matter is deposited in the tissues, and effete matter is returned into the circulation to be removed through the organs of excretion, take place with less freedom and activity, thereby allowing more or less accumulation, in all the tissues, of particles which in the healthy state of the organic action would have been removed.

When the exposure to cold ceases, and a more elevated temperature again restores the healthy state of the vital properties, the presence of these particles of retained matter embarrasses and disturbs the molecular changes, inducing a degree of susceptibility and organic action, as much in excess as there had been previous

deficiency. It is thus that sudden and extreme changes of temperature develop local inflammations; while more protracted exposure to moderate cold, from deficient fuel and clothing, as often happens among the poor in winter, lead to the slower but not less certain disturbance of all the functions, which constitute the less active grades of continued fever. The same view of the action of cold on the elementary vital properties, and through them on the molecular actions in the tissues, will explain the very frequent occurrence of that ephemeral form of fever, usually styled influenza, during the first warm days that follow a week or two of steady and extreme cold weather. But though mental emotions and the imponderable agents may, and sometimes do, exercise a direct influence over the vital properties, sufficient to develop active disease, either general or local, yet they far more frequently serve only to produce that degree of alteration in the properties and actions of the tissues, which constitutes a *predisposition*, and which requires the interposition of some more direct exciting cause to develop the full exhibition of morbid phenomena.

Keeping the forgoing observations in view, let us next examine the symptoms which characterize the first, or forming stage, of the different varieties of fever. All writers agree that this stage of the continued types of fever, including the typhus and typhoid, generally commences insidiously, and progresses so gradually, that a large majority of the patients can fix no definite hour, or even day, when their sickness commenced. Perhaps the earliest and most constant symptom, is a feeling of illness, obtuseness, or indisposition, without the patient being able to say definitely in what the indisposition consists. This soon becomes associated with dull, wandering pains in the head, back and limbs; a sense of weariness; alternate sensations of heat and cold; dryness, and an unnatural taste in the mouth; the mind is dejected; the sleep disturbed and unrefreshing; the appetite lost, or exhibiting some morbid peculiarities; the bowels sometimes feeling heavy and motionless, at other times disturbed, with two or three watery evacuations every day, the latter more especially in typhoid cases; and all these symptoms may continue from three days to three weeks before the patient becomes wholly confined to his bed. Where the

causes which lead to the disease exist in a high degree of intensity, however, as is frequently the case on crowded emigrant ships, in jails, camps, &c., the attack is often much more sudden and decisive, and under such circumstances generally assumes the character of a grave typhus. During the last two or three years, I have taken much pains to study the first stage of the continued forms of fever, both in hospital and private practice. And in all those cases which occur sporadically and pass through a protracted forming stage, I have found the pulse early, and pretty uniformly, slightly increased in frequency, but diminished in fullness and force; the capilary circulation retarded, as indicated by a cool and dingy state of the skin, and a slow return of blood after having been removed by pressure; a husky dryness of the surface, dryness of the mouth and fauces, and diminished secretion of urine. The inspirations, too, are less full and forcible, with occasional sighing, and a downcast or stolidly indifferent expression of countenance. The production of animal heat is also diminished in the very incipient stage of the disease, and in some cases it continues so until distinct chills are developed, while in others it gradually gives place to the more decided febrile phenomena without any appreciable chill or shivering.

On what do all these symptoms depend? What is the primary link, the starting point of morbid action? Can they be traced to a primary morbid impression on any one organ or tissue? It is true that most British and American writers refer these incipient phenomena to an impression of a depressing character on the nervous system. But well has Dr. Wood observed that there is something here "more than mere nervous depression." Indeed, almost the only symptoms referrible directly to the nervous tissue, are the local pains, which are more inconstant and variable than any others in the catalogue. That early, though vague, consciousness of indisposition, so far as my examinations go, is invariably accompanied by, and, I think, immediately dependent on, an altered or disturbed state of three universal functions, viz.: nutrition, capillary circulation, and the production of animal heat. And this disturbance consists in depression or retardation, consequent on a diminution of the elementary *susceptibility* of the whole organized matter of the body.

This property and these functions being elementary and common to all the tissues, we readily see how their disturbance would simultaneously involve that universal functional derangement, so graphically described many years ago by Dr. Fordyce.

The susceptibility of the primary cells and fibres of which the tissues are composed, being diminished, that peculiar affinity by which they elect new particles of matter, and reject those that have become effete and useless, is diminished in a corresponding degree. This necessarily involves more or less disturbance of the ultimate capillary and intestitial circulation, and the production of animal heat; and this again involves a change in all the secreting structures, the nerves, the muscles, and every other organized tissue; not excepting the corpuscles of the blood. This depressed condition of the various functions, soon results in the accumulation of offending particles in all the tissues, and an imperfectly depurated state of the blood, which excites the circulating system to an action increased in frequency, but impaired in force; while the diminished exhalation from the pulmonary and cutaneous surfaces lessens greatly the amount of caloric rendered latent, and thereby allows it to accumulate to an uncomfortable excess in the system. And here the second or febrile stage has fairly commenced, exhibiting, instead of those symptoms described in the forming stage, a quicker pulse, a dryer and generally hotter skin, more dryness of the mouth and fauces, a dull, watery expression of the eye, a deeper redness of the face, less muscular strength and steadiness, more decided pains in the head and back, more obtuseness of the intellect and special senses, and a more frequent and decided disposition to local determinations of blood, and the consequent development of local affections in the brain, chest, or abdomen.

The rapidity with which the symptoms are developed, the particular grade of morbid action or alteration of the elementary properties, and the special local determinations in such cases, will depend on the nature and intensity of the cause or causes, the season of the year, and the age of the patient. A very numerous class of cases occur in the large cities, both of this country and Europe, among those who have recently moved from the rural country districts to the more crowded streets of the city. The change in diet

and drink, and above all, the inhalation of a less pure and bracing atmosphere, often rendered worse by the occupancy of small and ill-ventilated apartments, undoubtedly induces in such persons, a modification in the elementary properties and functions of the whole system, through their influence on the quality of that universal stimulator of organic action, the arterial blood. In such persons the attack is generally insidious, and the forming stage protracted; but the changes induced by the causes enumerated, may be so rapid as to develop more suddenly the active phenomena of disease. And on the other hand, they may be so slow, that the functions of nutrition, metamorphosis, and calorification, gradually become adjusted to the new impressions, and acclimation takes place without any open morbid action. Another numerous class of cases occur among the poor, with whom an insufficient diet and clothing, co-operates with filthy, ill-ventilated, and damp dwellings, to depress the vital susceptibility, and develop a similar, though perhaps not identical, train of morbid action with that just described. In this class we find almost every conceivable grade of intensity and rapidity of morbid action. When the morbific causes exist and act in moderate intensity, as is usually the case in rural districts, and among the better class of recent residents of cities, the development of febrile phenomena is slow, the several stages of the disease protracted but moderate, and a fatal termination seldom takes place, except through the supervention of some local inflammation or visceral disease. If the attack comes on between the ages of eighteen and thirty years, when the digestive apparatus is most active; and if, in addition, it occur in the latter part of summer and autumn, when the well-known influence of the season has predisposed to gastric and intestinal determinations, it will almost always assume the form of fever, technically styled *typhoid*, with congestion, inflammation, and ultimate ulceration of the glandular structures in the mucous membrane of the small intestine. On the other hand, if the attack occurs in the earlier or later periods of life, when the cerebral and respiratory functions are predominant, or during the cold season of the year, when a low temperature has previously depressed the general susceptibility and diminished the cutaneous excretion, the specific

grade of febrile action, when developed, will be lower, and the local determinations more directly to the brain or thoracic viscera. When these two classes of cases are distinct and well marked, they are easily distinguished from each other. The first is generally recognized as the typhoid fever of authors, and corresponds strictly with the common autumnal fever of New England and all the non-malarious sections of our country; while the second, is the sporadic *typhus*, that infests the narrow, filthy streets, and the damp, uncomfortable dwellings of the poor in our cities, and not unfrequently shows itself under the name of *winter fever* in country districts. But I am satisfied, from the most careful clinical observation, that the two varieties merge into each other by such insensible gradations, that every practitioner of large experience, must have seen many cases, which it is impossible for him, from the symptoms during life, to rank positively in one class or the other. So true is this, that the most decided advocates of the separate nature of typhoid and typhus fevers, like Louis, Jenner, Flint, &c., are obliged to leave a considerable number of cases on the *doubtful list*, and even then, occasionally correct a diagnosis that they supposed certain during life, by a post-mortem examination.

When the continued forms of fever arise from the prevalence of some unknown epidemic influence, or the highly poisonous atmosphere generated in crowded ships, camps, jails, hospitals, &c., the primary morbid impression is made on the same elementary properties, and results in the disturbance of the same functions, but the primary lesion is generally more profound, the onset of the disease more sudden, and its whole course attended with more danger. If we compare with the foregoing, the essential phenomena of fevers of the periodical class, we shall find certain analogies and differences, no less interesting than important. In the first place, periodical fevers, unlike those of the countinued types, prevail so uniformly in certain districts of the country and at certain seasons of the year, that they almost irresistibly fix in the mind of the observer the idea that their efficient cause is some specific agent generated within such districts and incapable of generation elsewhere. But whatever may be the nature or origin of the efficient cause,

its *modus operandi* is the more immediate object of our present study. To pursue this study with the least liability to error, let us again take our station by the bed-side, and observe the initial phenomena, that usher in the more active stage of these fevers. Though the attacks of intermittents and remittents are much more sudden and decisive than those of the continued forms, yet, I never recollect to have met with a patient who did not complain of a forming stage varying from one to three or four days. "In general," says Dr. Drake, "a remittent is preceded by a forming stage of one, two, or three days, in which there is an increasing languor of the muscular system, inefficiency of body and mind, defective perspiration, rigors, sometimes alternating with flashes of heat, a torpid state of the bowels, increased or diminished secretion of bile, a bilious hue of the eyes, loss of appetite, a foul and generally white tongue, having sometimes a tint of yellow; and, in most instances, a dull pain in the head and back."—Again the same eminent author makes the first stage of an intermittent consist in a "reduction of vital energy, obtuseness of sensibility, suspended or perverted secretion, and diminished calorification." And these phenomena he attributes to the influence of a specific agent, floating in the blood, and possessing "a sedative and irritating quality, somewhat like the narcotico-irritating gases." But here, too, Dr. Drake, like Dr. Wood, follows the lead of Dr. Southwood Smith, and makes the function of *innervation* the first affected. What this term innervation includes, as used by authors, is not very clearly defined. If it refers to that peculiar influence which emanates from the brain, medulla oblongata, spinal cord, or ganglionic centres, to the various muscular structures, including the voluntary and involuntary or organic, in response to impressions received from the different surfaces of the body; then, certainly, it is less early and profoundly affected than several other functions. Indeed, according to my own observations, the evidences of disturbed nutrition, calorification, and secretion, invariably precede the symptoms of nervous disturbance. These evidences consist in a variableness or loss of appetite, an unnatural taste in the mouth, with some coating of the tongue, frequent sallowness and dryness

of the skin, scanty and high colored urine, variableness of temperature, and a universal feeling of langour or indisposition to exertion. To trace minutely and clearly the thread or chain of morbid action, I should assume that some agent, which constitutes the specific or efficient cause of periodical fever, had entered the blood, and by its presence throughout the whole organism, it so modifies the vital affinities, that the tonicity or texture of the solids becomes universally impaired, while the susceptibility remains normal or it is morbidly increased.

This interference with the tonicity and vital affinity of the solids at once retards or suspends those processes by which assimilation and nutrition are effected and animal heat developed; and also by which the secreting cells of the excretory organs are enabled to select from the blood, the effete particles which constitute their respective secretions. By this change, the formation of new corpuscles in the blood ceases; the disturbance of nutrition, metamorphosis, and calorification throughout the brain, the nerves, the muscles and everywhere, causes the general feeling of the lassitude and indisposition; while the retarded or perverted action of the secreting structures soon accumulates an amount of retained effete matter or perverted secretions, or both, which not only explains the loss of appetite, the coated tongue, the epegastric uneasiness, the scantiness of the urinary and cutaneous secretions &c., but which also directly co-operates with the irritant quality of the original specific cause, in exciting the elementary susceptibility to a much higher degree. It is while these primary perturbing changes are taking place in the tissues, that the nervous and muscular systems pass through that peculiar period of agitation which constitutes the chill, and which always terminates where the vital susceptibility becomes so much increased as to predominate in its effects over those arisng directly from the impaired tonicity. Hence the more irritating the qualities of the specific cause, and the more rapid the consequent accumulation of perverted secretions, the shorter and less marked the chill, and the more persistent the febrile excitement, constituting the *remittent* variety of the disease. On the other hand, when the sedative quality of the cause

predominates and it acts with moderate intensity, the tonicity of the tissues and the primary organic functions are impaired rather than perverted; the capillary circulation and calorification remain longer depressed; and consequently the chill is more perfect and protracted, while the succeeding hot stage is less violent and of shorter duration, constituting the ordinary intermittent. But there are other cases again in which the sedative quality of the cause so strongly predominates, and it acts with such intensity as to profoundly impair both tonicity and susceptibility, leading not simply to a chill, but to an absolute suspension of capillary circulation, secretion and calorification, constituting the true *malignant* or pernicious form of periodical fever, in which the reaction or hot stage supervenes slowly and imperfectly, or not at all. And there are still other cases, in which the essential cause acts so freely that active febrile phenomena are never developed, but its pernicious effects, are seen in the altered hue of the skin, the diminished energy and the morbid susceptibility of the patient. In all cases of simple periodical fever, when the hot stage commences, the organic susceptibility becomes so rapidly exalted that the heart and arteries take on a high degree of activity, the capillary circulation and production of animal heat become correspondingly active, accompanied by great restlessness, pains in the back and head a morbid acuteness of sensibility and of the special senses, and frequently, great increase of some secretions, with diminution of others. Here we see the marked contrast between the strictly periodical and continued forms of fever. In the first, tonicity is impaired while susceptibility becomes so much exalted as to induce the highest grade of irritative action throughout the entire organization. In the latter *susceptibility* is directly impaired, inducing throughout the whole course of the disease, obtuseness of sensibility and sluggishness of organic action; while the tonicity often remains so little impaired that patients will not unfrequently rise from the bed and walk, within a few hours of a fatal termination. Here too, we find an explanation of their widely different terminations and sequalæ. The high irritative organic excitement of the one cannot long continue without leading either to universally increased

secretion, constituting the sweating stage, to be followed by a more or less perfect intermission, or to local determinations, congestions, inflammations, and in the sequel to impoverished blood, impaired textures, and œdematous or dropsical effusions. While the impaired susceptibility, the enfeebled capillary circulation, the obtuseness of sensibility, and the sluggishness of the organic movements of the other, lead to a far more protracted and uniform continuance of morbid action, with less active and varied local determinations, and a greater ultimate tendency to softening and ulceration. The direct impairment of tonicity and vital affinity, coupled with the irritative excitement arising from exalted susceptibility, which constitutes the periodical form of fever, produces a more complete suspension of that part of the assimilative process by which the blood corpuscles are formed, and hence more directly and certainly leads to a marked impoverishment of the blood and impairment of the solid textures, than almost any other disease with which we are acquainted.

The three following cases and analysis are selected from my note book, for the purpose of illustrating the changes which the blood undergoes, while the elementary properties and functions of the solids are disturbed in such a manner as to constitute idiopathic fever. I have chosen to give, in this place, a very few cases in detail, rather than any general statement of the average results of many analysis, that the reader may see in their proper connection, the particular symptoms and stage of each case, with the accompanying changes in the circulating fluid. We have already, scattered through the literature of our profession, many general statements of the changes of the blood in different forms of disease, but very few of them contain any account of the particular symptoms, or stage of the disease, when the blood was taken. Hence much of their value, in a pathological view, is lost.

Case 1.

Peter Johnson, a Swede, aged thirty-five years, was admitted into the Illinois General Hospital, November 27th, 1852.

(*Continued next month.*)

SELECTIONS.

Clinical Examination of the Urine. A paper read before the Cincinnati Medical Society, Feb. 1st. 1853. By the President, JOHN LOCKE, M.D., Professor of Chemistry and Pharmacy, in the Medical College of Ohio, and Published by request of the Society.

(CONTINUED FROM PAGE 66.)

THUS procured, nitrate of urea is a beautiful article, almost white, and with so high a pearly lustre, as to approach a silver bronze. The crystals are in minute scales, and when pressed in a thin layer upon paper, exhibit a softened or selenite metallic lustre. If the *quantity* of the urea be sought after, the nitrate should be dried in a moderately warm place, and weighed; allowing 48 parts of pure urea, to every hundred parts of the nitrate.† But no attempt should be made to try the nitrate by a heat stronger than can be borne by the hand, without pain If it should be desirable to procure the pure urea, add carbonate of potassa to the nitrate, and decompose it, forming nitrate of potassa, and freeing the urea, which may be dissolved out by hot alcohol. The alcohol being evaporated, the urea will remain in lustrous silky crystals.

Mr. Alexander, now an M.D. of the Medical College of Ohio, then a pupil of Prof. Lawson, after receiving instructions in the manipulations, succeeded in procuring several fine specimen results in the analysis of urine. Amongst other things, he showed me some superior crystals of nitrate of urea, one of which, under the microscope, was so instructive in reference to the crystalization of that substance, that I immediately made a sketch of it. The outlines of this crystal are all parallel to the sides of an equilateral triangle. The crystal itself, is an irregular hexagon, but with every angle either 60° or 120°, and although the lines which formed the figure, are 14 in number, they have only three directions.

9th. Process for Uric Acid.—The quantity of uric acid in human urine is comparatively small, usually not over one part in a thousand. Gently warm about an ounce of urine, pour it into a conical wine-glass, in which a few drops of muriatic acid have been previously placed. In twelve to 24 hours, very small brown crystals will be seen floating on the surface, resting on the sides, and settling to the bottom of the glass. By dexterous agitation these may all be collected at the bottom, as a mass of red sand, and the

† Dr. Bird.

supernatant liquid may be decanted, and the crystals may be washed by adding water, agitating, and allowing a little time for subsidence, when the water may be decanted. A drop of the water, containing these crystals, should be placed on a slip of glass, or in a watch-glass, and examined by the microscope. The acid will then be seen mostly in elongated spiculæ, or stars, and sometimes in square or rhombic (diamond-shaped) plates. This acid is the true "red sand" or gravel. Without a microscope, it can be distinguished by its reddish color, its hardness, insolubility, and by its weight, by which it settles so much like sand, and may be washed so perfectly clean. It is a little more satisfactory to see a larger quantity than is afforded by a wine-glass full of urine, and I have often prepared it in a Florence flask, two-thirds full of urine, by adding 30 drops of muriatic acid, mixing thorough y by agitation, and allowing it to stand two or three days in cool weather, with occasional slight agitation towards the last, in order to collect the crystals at the bottom.

Birds and serpents discharge their urine and their feces by a common orifice, their urine being of a tolerably solid consistency, of a white color, and consisting of urate of ammonia. To procure uric or lithic acid, the white urine of a large serpent, the Boa Constrictor for example, is boiled with a solution of potassa until the urate of potassa is formed, which may afterwards be decomposed by adding muriatic acid, and thus precipitating the uric acid. This, it will be recollected, is the acid which is sometimes precipitated spontaneously in the kidneys or in the bladder, giving rise to what is popularly called "the gravel," a condition which calls for the administration of alkaline remedies, according to the above quoted passage from Dr. B. Jones.

10*th. Examination for Sugar.*—Diabetic urine has usually a high specific gravity, but this may be caused by an excess of urea. Several tests are given, in the standard works on the subject, for detecting sugar in urine. After repeating several of the processes given, I am better satisfied with a test, perhaps the most ancient, and certainly one of the most simple. I mean the fermentation test. Take a few ounces of the suspected urine, add a little yeast to it, and expose it at a temperature between 60 and 100 degrees Ft., in such a manner that if fermentation ensues, and carbonic is evolved, it will be collected. The most simple arrangement is, to fill a long four oz. vial with the urine and the yeast, and inverting it in a saucer, having already a little urine or water in it, support it uprightly, by any convenient means, and leave it exposed to the temperature already named, 60° to 100°. If sugar be present, in about three hours small bubbles will be seen accumulating about the yeast, and they will gradually escape and rise to what is now the upper end of the vial. Authorities say that

there will be a cubic inch of carbonic acid gas evolved, for every grain of sugar in the urine. It is evident that in the above arrangement, with the inverted vial, as soon as the gas begins to accumulate, it displaces a portion of the urine into the saucer from which no gas can afterwards be collected. To obviate this, an apparatus may be adopted, consisting of a short bottle, to which a tight cork with a bent tube is adopted, the tube terminating openly under another bottle or small receiver, inverted with its mouth under water in the ordinary manner of collecting gases. In my own experiments on urine, to which a weighed quantity of grape sugar has been purposely added, although I have always procured carbonic acid, I have never obtained so much as the authorities have indicated.

Apparatus required for the Clinical Examination of the Urine.—In the course of Lectures of Chemistry in the Medical College of Ohio, for the session of 1852 and 3, I was desirous of putting into the hands of the Medical Students such instruments as would enable them to repeat most of the important experiments on urine and blood at their own rooms, where they would be compelled to perform their own manipulations, and thus become masters of the subject. After several trials, I devised the following instruments, which answers not only the purpose proposed, but may be used for a great variety of chemical experiments.

1st. A small furnace and water bath. For this purpose an apparatus already in the market, under the name of the Nurse lamp, with some new additions, answers well. It is commonly made of tin, and may be had for about 75 cents, including the cylinder, the spirit lamp, a steam bath, or water boiler, and a smaller tin vessel to use over the water bath. These are all made of tin, and will answer the purpose if carefully used, but are liable to be unsoldered if the boiler gets empty of water, or if the lamp wick gets too high, and the spirit in the lamp gets to boiling, and fills the whole affair with the flame of alcohol. This accident calls upon one to envelop the whole furnace in a woolen cloth, or indeed in any cloth which may be seized at the moment. From the liability to be unsoldered, a nurse lamp, made entirely of copper, brazed together, is preferable. Two pieces of additional apparatus sometimes furnished, are also convenient, a little tea kettle, about four inches in diameter, and a glass or earthen cup, to be used over the water bath. The dimensions of this nurse lamp, are about 8 inches high, and 4 inches in diameter, with a boiler 4 inches in diameter at top and 3½ at bottom, 3¾ inches deep, having a shallower cup, the evaporator, 3¼ deep, to fit into it at the top, in order to hold things to be submitted to the water bath heat. The glass or earthen vessel should be similarly shaped, and is used in the same place. These vessels are furnished with a cover like that

of a coffee pot, and may be used for making any kind of infusion requiring the heat of the water bath.

The spirit lamp should be two and three fourth inches in diameter, and two inches high, with a wick tube nearly one inch high above the lamp. The door of the cylinder for receiving the lamp should be three inches square. I have omitted to mention, that besides the lamp door in the cylinder, there should be two air holes, three-fourth inches in diameter, about one and three-fourth inches below the top of the cylinder.

2. Besides these things which are usually furnished with the nurse lamp, I have added several tin dishes four and one-fourth inches in diameter, and "raised" or rather depressed three-fourths of an inch, like a watch glass or saucer. Indeed each one is an inverted coffee-pot cover without its soldered rim. They are furnished at the tin furnishing stores at 20 cts per dozen. These are to be used as evaporators over the water bath, where glass of earthen evaporators may be substituted. A neat porcelain saucer becomes an elegant evaporating vessel over the boiler of the nurse lamp. Some of the above tin capsules, may have holes cut through them in the middle, from one to two inches in diameter, when they become holders for large watch crystals to be used over the boiler as evaporating vessels.

3. The Crystal Holder. This is made of Russian sheet iron, and consists of a circular part two and a half inches in diameter, and "raised" or dished by hammering one-fourth of an inch deep, and a handle like a spoon handle two and a half inches long, and about one inch wide, made of one and the same piece of iron. The object of this instrument is to be enabled to hold a watch crystal placed in it over a lamp or candle for boiling or evaporating. The watch crystal held naked over a lamp or candle is apt to be broken, but when held in this iron holder it is protected. The bowl or dish of the holder should be a little flatter than the crystal to be held, in order that the crystal may touch in the centre only, thus communicating the heat to the centre, where it is covered by the liquid, and not to the circumference, where it is dry and will become so hot, that when the liquid boils up upon it, the glass will be broken.

4. The urinometer.

5. The glass tube capable of receiving the urinometer when in use.

6. A small thermometer.

7. Several chemical re-agents as such:

Red Litmus paper;
Blue Litmus paper;
Muriatic acid;
Colorless nit. acid;
Caustic potassa.

8. A small accromatic microscope is desirable, but much can be done without it.

As was intimated at the commencement of this paper, it was not my intention to describe the diseases of which the abnormal conditions of the urine are the diagnostic symptoms. My purpose is answered, when I enable the physician to examine the urine in such a manner, as to ascertain with accuracy its characters, and to identify its deposits with scientific discrimination. The society are referred to the standard works on the practice of medicine, for the pathology and treatment which will be intelligible, *only* when the "clinical examinations" have been properly conducted. I have omitted any remarks on the detection of the common inorganic salts of the urine, such as the sulphates, muriates, phosphates, &c., of soda, potassa, lime, magnesia. These may be exhibited by the usual chemical tests. The whole mass of inorganic salts or the fixed salts of the urine may be obtained altogether by boiling down the urine to dryness, and urging the heat to redness, by which all the organic matters are charred. It is not necessary that the black spongy mass of charcoal should be burned out; for if the charring be complete the salts may be removed by filtering water through the pulverized mass. The clear lixivium yields by evaporation clean white crystaline salts.

Oxaluria is a disease or a symptom of disease so lately discovered, and has been so graphically described by Dr. Bird, that I am tempted to quote the following passage from his work. He says:

"Persons afflicted with the form of the disease referable to this class, are generally remarkably depressed in spirits, and their melancholy aspect has often led me to suspect the presence of oxalic acid in the urine. Sometimes a peculiar lurid greenish hue of the surface has been observed; but more generally the face has the dark and dingy aspect common in some forms of dyspepsia, in which the functions of the liver are deranged. They are generally much emaciated, except in slight cases, extremely nervous, and painfully susceptible of external impressions, often hypochondriacal to an extreme degree, and in very many cases labor under the impression that they are about to fall victims to consumption. They complain bitterly of an incapacity of exerting themselves, the slightest exertion bringing on fatigue. In temper they are irritable and excitable. In men, the sexual power is deficient, and often absent, an effect owing probably to the exhaustion produced by the excessive secretion of urea, so common in this affection. A severe and constant pain or sense of weight across the loins is generally a prominent symptom, with often some amount of iritability of the bladder. The mental faculties are but little affected, loss of memory being sometimes present. Well marked dyspeptic feelings are always complained of. Indeed in most of the cases in

which I have been consulted, I have been generally told that the patient was ailing, loosing flesh, health and spirits daily; or remaining persistently ill and weak, without any definite or demonstrable cause. The urine is always of high spec. gravity, often within the diabetic range, and seldom below 1025 or 1030. This spec. grav. depending upon not only an excess of urea, for the urine generally crystalizes readily with nit. acid, but upon the existence of an abnormally large proportion of the extractive matters of the secretion. It is invariably acid, often excesssively so. The tendency to eruptions of minute furunculi, and even sometimes of large boils, is an exceedingly frequent concomitant of the state of urine under consideration, and a striking indication of the depressed state of the general health. In a few cases the patients have been suspected of being phthisical. It is, however, remarkable, that I have yet met with very few cases in which phthisis was present. In very few instances only have I seen the cases terminate in the formation of calculus."

Mental anxiety is mentioned as a cause of oxaluria accompanied by irritability of the bladder, and an increased quantity of urate of ammonia. Lawyers when suffering anxiety about their causes, and studying them intensely, are subject to the disease.

From the N. Y. Jour. of Medicine.

A Case of Osteo-Aneurism (?) occurring in the Os Calcis; Amputation and Recovery. By W. PARKER, M. D., Professor of Surgery in the College of Physicians and Surgeons, New York.

IN an article on *Pulsatory Tumors of Bone*, in the last number of the *N. Y. Journal of Medicine*, by Dr. C. D. Smith allusion is made to the following case, which occurred in my practice. A similar case occurred at the Emigrant Hospital, under the charge of Dr. Carnochan, and by him was published, with a resume of the subject, in the *N. Y. Medical Gazette* for January 1853. Of these three cases, which comprise, I believe, the experience of the profession in this city, in regard to this form of disease, my own remains unpublished. I wish, therefore, to place it on record, as a contribution to this subject, the history of which has already been creditably given in the papers above referred to.

The patient was an intelligent physician, Dr. Wm. Werden, of Salisbury, who drew up the history of his own case, at my request. The appearances of the morbid specimen have been mentioned by Dr. Smith. At the time of writing his case, the doctor was in the enjoyment of good health; I have more recently learned that he is again on the decline, with well marked symptoms of an advanced stage of pulmonary disease.

Case.—In the summer of 1842, while jumping for recreation, I struck my left heel upon a round stick about an inch in diameter; it gave me severe pain at the time, which, however, lasted but a few minutes, and I thought no more of it. Several days after, upon rising from my bed in the morning, I experienced a sharp pain darting through my heel, which quickly passed off, but recurred again on the following morning in the same manner. This transient pain continued to return every morning, on assuming the erect position, until the summer of 1847, without the occurrence of any other symptom, such as swelling or tenderness, to indicate the nature or seat of the difficulty. This pain invariably returned on rising to my feet, after resting sometime in the horizontal position, but never continued to exceed one or two minutes. During this period, my heel gave me no uneasiness, my general health was good, with the exception of some dyspeptic symptoms for two or three years after the injury, which I attributed to sedentary habits, being then a student, and which passed off after engaging in practice.

In the summer of 1847, I began for the first time to experience a tenderness about the heel whenever it came in contact with solid substances with more than ordinary force, as in stamping or making a misstep. This tenderness gradually increased until I began to suffer some pain in walking at my usual pace, unless I was careful to slide my foot along without raising it but slightly from the ground. There was no appreciable swelling until December of that year, when, upon drawing on my boot one morning, I suffered so much pain that I was obliged to withdraw it immediately. During the day, the heel swelled considerably, and being hot and painful at night, I scarified it deeply and held it in warm water to favor the bleeding. On the following day, I was disappointed at finding my foot still worse, and was obliged to use a crutch in walking. Leeches and poultices were applied, and subsequently iodine and other medicinal applications were employed, but without even palliating the symptoms. Nothing but cold water and snow gave me even temporary relief; these were very grateful, and I resorted to them often, as the relief they afforded enabled me to attend to my business, though I suffered much pain night and day. I continued to grow gradually worse, until some time in February, 1848, when I determined to consult Dr. Parker. At this time there seemed to be a thickening of all the tissues about the os calcis, with a deep seated, constant pain, as if the fibrous tissue was put upon the stretch; occasionally the pain was lancinating.

Dr. Parker advised an incision down to the bone. which he accordingly made, dividing the periosteum of the os calcis about an inch and a half on its inferior surface; the wound bled freely and gave a little relief to the severity of the pain, but of short dura-

tion. I kept the wound discharging four or five weeks, but finding no material benefit, allowed it to heal. Soon after this, I applied moxas, by the advice of Dr. Ticknor, U. S. N., but with no benefit. The pain continued to increase in severity, being worse at night than during the day. I resorted to large doses of morphine to obtain sleep, and often two grains at a dose would produce only a short nap, from which I would be awakened by the most excruciating lancinating pains in the heel. I finally began the use of quinine in the summer of 1848, as I was beginning to emaciate and lose my appetite, taking eight grains per day, with cold applications to the affected part. Under this treatment my appetite and general health improved, and also the local difficulty; the pain was much less severe, and in a short time I threw aside my crutch, still continuing my practice, and got around very comfortably with a cane. This improvement lasted until December, 1848, when I had an attack of acute bronchitis, for which I was bled and took antimony, and of course omitted the quinine. I was confined to my bed about ten days, and in this time the pain in my heel became worse; on getting up I discovered for the first time, a tumor on the outer aspect of the heel, just below the external malleolus, which had a spongy, elastic, and pulsating feel, and was painful on pressure; the veins were much enlarged about the heel. I again resorted to the quinine, from which I had derived so much benefit, but it now gave me no relief.

I grew worse so rapidly, that I again visited New York with the intention of submitting to amputation, if this course was deemed advisable. I had come to the conclusion that I could not much longer survive such indescribable agony (I will not call it by so soft a name as pain). Dr. Parker advised immediate amputation, to which I cheerfully assented. He performed the operation on the 24th of January, 1849, after administering a mixture of chloroform and ether. I resumed the practice of my profession about three months after the operation, and have continued actively engaged since, in the enjoyment of good health. I have supplied my deficient extremity with an artificial limb, which answers its purpose admirably.

From the Medical Times and Gazette.

Color-Blindness.

Dr. Wilson, of Edinburgh, in a paper in the *Athenæum*, refers to this subject as having an important bearing on the system of railway signalling by colors, especially by red and green danger signals. This affection ("Daltonism," *Cromato pseudopsis*, *Achromatopsia*, etc.,) Dr. Wilson considers in three important

practical relations: 1. That the affection is much more prevalent than is generally imagined. 2. That red and green, the colors used for danger signals on our railways, are exactly those which are most frequently confounded with each other by the subjects of color-blindness. 3. That color-blindness implies not merely a confusion in distinguishing between two or more colors, but, at least in many cases, an imperfect appreciation or feeble hold of color altogether as a quality of bodies. Prevost says, that color-blindness occurs in one male among twenty. Seebeck (in Poggendorff, Annalen, xliii. 177) found five cases among forty youths in Berlin. Professor Kelland, of the University of Edinburgh, has this session found three examples among 150 students. In four of the cases which had come under Dr. Wilson's notice, none of them could be trusted to distinguish a red signal from a green one; and there was not only false vision of colors, but, in many instances, total color-blindness—so that the subjects of it doubted as to all colors, and would not swear in a court of justice as to any color. These facts, in connection with the continually augmenting number of railway accidents occuring, must show the imperative necessity of strict examination being instituted as to the perfect vision of all railway servants.

From the Medical Times and Gazette, March 26. 1853.

Duty of Medical Men.

Dr. Todd, in his farewell address, on resigning his professorship, made the following remarks:—

"It appears to me, that when a man proposes to devote himself to the practice of an honorable profession, he has a twofold duty to perform; first, to fit himself to the utmost of his ability for the practical duties of that profession; and, secondly, having done so, it is incumbent on him to divest himself, as far as possible, of every engagement which may interfere with his bending his thoughts and attention to the various anxious, difficult, and often perplexing questions which are continually arising in the course of his professional practice. Every member of a liberal profession should keep it constantly in view that he exercises his calling not simply for his own personal benefit, but for the public good, and for the good of his profession at large. So every practising physician or surgeon, whether the sphere of his labor be within wide or narrow limits, should bear in mind that in the successful application of his art, by fair, honorable, and truthful means, is involved the repute and estimation in which his profession is held by the public at large. Let each of us act under the feeling, that to himself specially

is committed the keeping of the honorable character and the scientific credit of our common profession, and he will have the strongest motives, not only to eschew everything that savors of charlatanical pretence, but to seek for and insure the highest means of moral and intellectual culture."

From the Boston Med. and Surg. Jour.

Nitrate of Silver in Dyspepsia or Chronic Gastritis.

SIR,—During the last twenty years I have had many cases of inveterate dyspepsia or chronic gastritis. A long course of dieting, with occasional *pro re nata* medicines, has afforded partial relief only, in many cases. Some years ago, I used nitrate of silver and opium in cases attended by chronic diarrhœa, with success, and more recently I have used the same remedy when diarrhœa was only occasional and often absent. From the trials I have made and the success I have obtained, I think the nitrate promises to be a very useful remedy. My experience has not been large in the use of it as a remedy for dyspepsia; but in a few cases, and so far as I have made trials, it has acted with the promptness and certainty of quinine in ague. I begin with a pill containing a quarter of a grain of nitrate of silver and a quarter of a grain of opium, administered three times a-day. After using this quantity several days, I double the quantity of the nitrate, but not of the opium; and when opium is contra-indicated, I omit it altogether. In some cases I gradually increase the nitrate to one grain (and even two grains in one instance) three times a-day. The remedy certainly deserves further trial, and my design in this short communication is to call the attention of the profession to an important subject, and to request others to try the remedy and note the results.

W. A. GILLESPIE, M. D.

Louisa Co., Va., March 24, 1853.

From the Gazette Medicale.

On Hemorrhage. On a New Styptic. By M. PAGLIARI.

THIS styptic forms a subject of a long communication to the Academie des Sciences, by C. Sedillot. Its composition is as follows: eight ounces of balsam of benzoin, one pound of sulphate of alumina and potass, and ten pounds of common water are boiled for six hours in a glazed earthen vessel, care being taken to add fresh quantities of *boiling* water, so as to supply the loss in evaporation, and to stir continually. At the end of this time the super-

natant liquid is separated from the undissolved benzoin, which has lost its odor and inflammability, and filtered and preserved in glass bottles. The liquid thus obtained, is limpid, and of the color of champagne; its taste lightly stypic, and its odor pleasant and aromatic, and when evaporated it leaves a transparent deposit on the sides of the vessel.

The styptic properties of this preparation seem very remarkable. A single drop immediately coagulates a cupping-glassful of blood, and a larger quantity (equal proportions) converts the blood into a firm and resisting solid. Applied to a wound, the hemorrhage ceases almost immediately, in consequence, as it would seem, of the formation of such clots upon all the orifices of the bleeding vessels. The application also produces no irritation and inconvenience, nor does it interfere in any way with the process of cicatrization.

The cases given are well authenticated, and the results such as to leave no doubt as to the valuable styptic properties of the preparation. There are cases of obstinate primary and secondary hemorrhages, after surgical operations; one from a severe cut in the finger; some from the extraction of a tooth. In these cases a piece of lint was soaked in the styptic and bound upon the wound.

From the Gazette Medicale.

On Reflex Phenomena. By M. Cl. BERNARD.

REFLEX Phenomena are of two kinds: the one having for object the accomplishment of the functions of organic life, the other those of animal life. M. Bernard has by his experiments endeavored to show that both of these phenomena are originally identical, and that the great sympathetic nerve plays a prominent part in their production. He first examined the reflex phenomena of organic life.

Two kinds of nerves are requisite for the production of these phenomena: the first transmits the impression to the nervous centres, the second to the viscera. With one order of these nervous filaments is always connected a ganglion of the great sympathetic; example: the ligual nerve transmits the impression of taste to the nervous centres, a special nerve then conveys a corresponding excitation to the submaxillary gland; on one of these nerves is situated a ganglion of the sympathetic, the submaxillary ganglion. —Another example: the optic nerve and the motores oculorum, the first transmitting the impression, the second the reflex excitation, are separated by the opthalmic ganglion. The pneumogastric

nerve may be considered in the same light, in its relations with the liver, lungs, and spinal marrow; the last is here a conductor of reflex excitation, and the ganglion of the solar and cardiac plexuses play the same part as that which has been assigned in the preceding examples to those of the submaxilary and opthalmic regions.

Excite the lingual nerve, and the secretion of salva will be increased; cut the submaxilary ganglion, the nerve which connects it with the nervous centre, and the excitation of the lingual nerve will no longer produce this phenomenon. The experiments of Horbert Mayo prove that in the movements of the pupil, the results are identical as regards the optic nerve and the motores oculorum.

The pneumogastric nerve is the seat of analogous phenomena; as example: this nerve transmits to the nervous centre the impression made upon the lungs by atmospheric air, their habitual excitant; this impression, by means of the spinal marrow and sympathetic, immediately causes the production of sugar in the liver, which secretion, the result of reflex action, corresponds to the excitation of which the lungs are the seat, just as the secretion of saliva is the result of an irritation of the lingual nerve. Excite the lingual nerve and the secretion of saliva will be exaggerated; excite the lungs by means of chloroform or chlorine, and the secretion of sugar in the liver will be increased. From these considerations, M. Bernard is led to attribute the exaggerated production of sugar in the liver, caused by irritation of the pneumogastric nerve, to the reflex phenomena of organic life.

After having called the attention of the society to the important function which is performed by the great sympathetic in the production of visceral reflex phenomena, M. Bernard asks if the reflex phenomena of the limbs have not, even in this last point of view, a great analogy with the preceding; it seems at the first glance that such is not the case, for in the experiments of Marshal Hall, the ganglia do not appear to have any relation with the production of reflex movements. The following experiment, however, imagined by M. Bernard, seems to show that the intervertebral ganglia cannot be wounded without a corresponding cessation of reflex movement in the limbs. By a singular disposition the roots of the nerves of the anterior members in the frog, are seen, on dividing successively the muscles of the shoulder, to the outside of the medulary canal; the posterior provided with their proper ganglia. If these be examined attentively it will be observed that *all* the nervous filaments of the posterior root, do not traverse the ganglia, and that a certain number of them may be easily isolated by the point of a needle. From this anatomical arrangement it results that the ganglia may be destroyed and still a portion of the

posterior root remain intact. Now if the section of the ganglia in the living frog be completed, reflex action ceases in the corresponding member; the animal no longer withdraws its foot on its being irritated; that sensibility, however, remains perfect, is proven by the fact that the animal manifests signs of pain by movements of the *whole* body. This experiment shows, then, that the intervertebral ganglia are necessary to the production of reflex movements in the limbs. Lead by analogy, M. Bernard concludes, in assimilating the intervertebral ganglia with those of the great sympathetic, that they are both necessary in the production of the two order of reflex phenomena admitted by him.

Editorial Correspondence of the Charleston Medical Journal and Review.

PARIS, MARCH 5th, 1853.
Rue de Seine, St. Germain.

Medical Teaching in Paris; Epidemic of Typhoid Fever, Treatment of; M. M. Briquet, Bouilland and Louis; Post Mortem; Statistics; Suicides; Asiatic Cholera; Puerperal Fever; M. Trosseau; Treatment of Rheumatism by Quinine and Veratrine; Service of M. Guersant at Hospital for sick children; Surgical Operations; Cervical Rheumatism; Erectile Tumour; *Cours d'Accouchement* in Paris; Sages-femmes; Recent expression of the views of M. Coste on Embryology; Honors conferred upon Americans, &c.

D. J. CAIN, M.D.:

Dear Sir:—As I have quite a *melange* to introduce, it is best, perhaps, to address this communication to you personally. Good reasons exist for the non-appearance of one in the March number, but these shall be reserved for your private ear.

We are of the midst of a period in the year when medical science is pursued with more vigor than at any other—when the Professors at the *Ecole de Medecine* are in the midst of the winter campaign, some of them with an audience of a hundred, others with upwards of a thousand. Now also there are a legion of Lecturers, public and private, who occupy almost every hour of the twenty-four at the *Ecole Practique*, and in private rooms in the neighborhood. Besides, each Interne or Chief of the Cliniques of any note, has his private class of four or five at the Hospitals, who, for twenty-five to fifty francs per month, enjoy the privilege of making visits and examinations, and of studying, auscultation and percussion with him during the evening. The College of France, the Sorbonne and the Jardin des Plantes, have each also its corps of Lecturers and Professors, who discourse on general subjects:—Law, Theology, Ancient and Modern Literature, &c.; but among whom, nevertheless, are found M. M. Geoffroy, Saint-

Hiliare, Flourens, Milne Edwards, Coste, and, during the summer, M. M. Orfila, Magendie and Bernard. The latter has just completed an extremely interesting private course on Experimental Physiology with vivisections, and we had intended replacing this letter with a portion of our notes taken during their delivery. A friend, however, having furnished us with some of his own, we willingly send them, possibly continuing the subject ourselves at a future time when more leisure shall be allowed us. We may add that M. Ludovic's Demonstrations at the school for Practical Anatomy have also been quite instructive. He was, you are aware, the collaborator of Bongery in the preparation of his Plates, and one of the most adroit dissectors in Paris.

Among those first alluded to, M. M. Denouvilliers and Orfila attract much the largest number of followers. We have for two months been attending M. Malgaigne, at the School of Medicine, during which time he has confined himself to the surgical treatment of maladies of the Eye; M. Denouvilliers has consumed the same period in the introductory portions of general Anatomy, having only within a few days commenced with a particular region. One may judge by this how minutely they pass over the subjects allotted them, in my opinion consuming a disproportionate amount of the space in treating of only a fractional part of what demands consideration, and what the student will require. However, they allow him more years in which to earn his diploma here than in the United States, and can thus afford to be *thorough*. We are aware that it is impossible for the same condition of things, however desirable, to exist in our country, until Governments, whether State or General, shall forcibly assume the direction and expenses of certain species of educational establishments, and wrest from the hands of one set that may be unfit, the power to confer diplomas upon others equally incapable of assuming the responsible duties of the physician who *suddenly* goes out to cure a thousand various maladies, each with its own peculiar history, its characteristic phases and relations. Thus aiding the well selected power which instructs and which confers; liberating the professors from the thraldom of pecuniary competition, and leaving them to that of intellectual; thus enabling them to direct all their energies in elevating and ennobling the profession. If the reward of the professor depends upon, and is in proportion to, the number of those who enrol in his school, he must at times enter into strife with ignoble rivals, the worst of human passions mingle in the contest, underbidding and depreciation ensue, and the profession sways backward as often as it does forward, instead of moving directly and constantly upward in the path of progress.

An epidemic of Typhoid Fever is very prevalent in Paris at present, and it is seen in all the Hospitals. In these it is quite

interesting to witness the variety of treatment adopted by each physician of note, as his medical tendencies incline; that pursued respectively by M. M. Boullaud, Briquet and Louis, whom I have followed, presents many points of difference, and it has been difficult to determine on which side the scale of success leans. We hope, however, to be able to send a paper by a medical friend who has watched closely the service of the former, and who can furnish some testimony with respect to his mode of employing the lancet in this disease. M. Louis very generally administers seltzer water, vinous lemonade, and adopts, to a certain extent, the expectant system. M. Briquet at La Charite pursues what appears to me rather a middle course. He abstracts blood in the early stage of some cases which seem peculiarly fitted for it. I may observe here that I have also heard M Trousseau say, that even as late as during the second and third septenary period, he was in the habit of bleeding to prevent the increase, or destroy the congestion of the lungs which so often exhibits itself, its approach and presence being of course easily discoverable by the physical signs. M. Briquet relies with much confidence, (and my own observation in his wards can sustain him,) upon the application of cups and scarification to the mastoid region during delirium and coma of Typhoid. It completely checks the increase of these dangerous symptoms, as I have repeatedly witnessed. He does not give mercury internally, but applies plasters of mercurial ointment over the entire abdomen until the secretions become active, or the tongue and skin exhibits the desired moisture. This method of using the remedy might more easily reconcile itself to those who so much doubt respecting the advantages of its internal administration. He gives ordinary Bordeaux wine, during the period of convalescence. These means, thus generally expressed, are often associated in his practice with the use of ice, administered in every possible way, and through every channel—bladders filled with it are applied to the scalp, it is dissolved in the mouth and given with enemata. One of his Internes mentioned to me this morning, that he had lost but one case within three weeks. There are between twenty and fifty sick of the disease in each service of the Hospitals, and few of these fail to present gargouillement, the characteristic rose mark and sudamina.

As the subject of typhoid fever has been much discussed of late at the South, and in the pages of this Journal, it may not be thought useless to consider the following autopsy which I witnessed at La Charite a few days since. It is instructive as indicating the characteristic march of the disease in an individual in whose system it was not modified by medicines. The subject, a man of about 33 years of age, of good conformation when he entered the Hospital, presented every favorable condition save the existence of the endemic; this had seized upon him as it had upon most of those

who had within the last year or two moved from the country to Paris, and who did not live under favorable hygienic conditions. He had been bled, but absolutely no medicines were taken with the exception of *tisans* and mucilaginous drinks. Notwithstanding, the entire lining membrane of his *stomach* was intensely red and exhibited all the traces of severe inflammation: there was some exudation of plastic lymph, and the particles of coloring matter seemed infiltrated beneath the mucous coat; when scraped off with a sharp bistoury, the surface beneath was white. Thirty of Payer's glands were enlarged and inflamed, decreasing in size from the commencement of the colon, until they disappeared in the small intestines. The largest were about an inch and a quarter in diameter, with elevated edges, presenting, as M. Briquet remarked, precisely the appearance of carcinoma; the surface of those situated most inferiorly exhibited the yellow summit, indicating the commencement of gangrene. No other portion of the intestinal canal was diseased, if we exclude the above enlarged mesenteric glands. The *spleen* was four times the ordinary size, though it did not appear that the deceased had suffered from intermittent fever. The cavities of the *heart* contained some fibrinous deposits, and its muscular tissues were soft. The lungs showed previous inflammation of the bronchia, and the lower lobes were still engorged; these did not compromise the life of the individual, as quite a large portion was spongy and elastic. The consistence of the *brain* was firm, no fluid was found in the ventricles, but there was venous engorgement on its surface. The *liver* and other organs remained quite natural.

Four cases of Asiatic Cholera appeared at Hotel Dieu during the month of January—so said the journals and the physicians! I heard M. Louis observe, a few mornings since, that the diarrhœa or cholerine, which had since existed to a certain extent, had not respected any class of the patients, not excepting those with typhoid fever. Before leaving the subject of this latter affection, which is now on the decline, I append a few statistical items which I have selected and re-arranged from a mass of valuable matter contained in the *Moniteur*. It may afford data for comparative estimates in the United States.

On the first of March there were 1,422 sick of the disease, 4,344 having been the maximum of those sick in the Hospitals. At the same time the number of the sick, generally, has descended from 6,735 to 6,618. From the 19th to 27th of February, (9 days,) 131 had died of 1,253 sick of typhoid in hospitals, or about 1 in in 100—a proportion less than has characterized any previous epidemic. The winter has been a very wet one, the Seine having been higher than for many years past, and snow having fallen frequently within the last month.

During the year 1852, there were 29,873 deaths in Paris. 29,664 had the relations of sex, age and disease indicated. Of these 16,220 were males, and 14,444 females. In 1851, there were 29,709 deaths; 15,110 males, 14,599 females. The most fatal period of life was under three months; the least, between six and eight years. Among the 29,664 deaths, maladies of the chest, digestive apparatus, and Typhoid Fever occurred most frequently. Of Pulmonary Phthisis, there died 2,073 males, 2,038 females; of Pneumonia, 1,279 males, 1,346 females; of Pulmonary Catarrh, 849 males, 955 females; of Enteritis, 1,395 males, 1,365 females; of Typhoid Fever, 603 males, 503 females. The temperature was quite elevated during the whole year, though there were few atmospheric variations. Of the 29,873, 10,157 were in Hospitals, remainder *a domicile*, a word which may well be retained to mark those sick in the city, but not in the medical establishments. In 1829, when statistical researches commenced to attract greater attention, there were 17,101 deaths *a domicile*, and 9,884 in the Hospitals, the population then being 776,241.—In 1832, the numbers rose to 30.843 dead *a domicile*, 15,481 in Hospitals. This increase is accounted for by the presence of Asiatic Cholera. 1814, the year of the war, was the most fatal, there being 24,197 deaths, the severest epidemic of Typhoid ever experienced in Paris, contributed to swell the number of victims.—The most melancholy reminiscences are said even now to attach to this sad epoch, which elicit a great deal of generous sympathy.

We observe, from comparative observations, that the number of persons carried to the Morgue annually varies from 250 to 320 males, from 40 to 60 females and from 15 to 25 new born—the males generally being to the females in the ratio of about five to one. From the year 1819 to 1828, there were transported to this spot 2,765 cadavers, of which 485 were female. To show the depressing effect of an epidemic, I will cite for comparison, the two years 1831 and 1832, when the population was of course nearly the same. In the former there were 232 bodies of males, and 67 females and 5 new born. In 1832, the year of cholera, 1,007 of males, and 225 females. It must be remembered that these include not only suicides but those also destroyed by accidents. It is remarkable that among the suicides of the past year there were 4 boys between 8 and 15 years of age, and 6 girls; 13 boys of from 15 to 20 years, and 9 girls. There were, also, 8 men and 4 women of from 70 to 80 years of age.

On account of the severity of Peuperal Fever at the Clinique of the School of Medicine, M. Paul Dubois has had to discontinue the reception of parturient women. The epidemic was attended with considerable mortality. They have not, however, been able to practice fumigations or purification, as the *Bureau of Admin-*

istration have been forced to occupy the beds with Typhoid patients—so great is the need at present of accommodation for the sick.

Our readers are aware that M. Trousseau has been appointed in the place of M. Chomel, at Hotel Dieu, where his cliniques are very popular indeed. It is a source of extreme regret to many that he has thus been forced to leave the *Hopital des Enfants' Maladies*, and to discontinue his usual course of Lectures during the summer on Meteria Medica and Therapeutics. The treatment of acute Rheumatism by Quinine, commenced by Briquet, and to a certain extent discontinued, on account of the doubtful character of the termination of one or two cases in which large quantities were administered, has been revived of late, and the impression respecting it gains favor daily. I have seen M. B. give it with good effect quite often. M. Valleix employs and recommends it at La Pitie, and I hope to be able to send a paper on the subject by a gentleman who attends his *Services* and Lectures. One gramme (15 grains) is administered once or twice a day, and the patient kept partly quininized. The gravity of the usual symptoms daily decrease, and it seems to be not at all hostile to cordiac complications. M. Trousseau, in commenting upon this, and expressing his favorable impression, alluded also to the expense attending the use of this agent, accompanying it at the same time with the relation of a remarkable instance of recovery from acute articular Rheumatism, which was then in his wards. It was true, he added,. that it was as yet an isolated case, but the repetition of the means used might give equally favorable results. It followed the employmennt of Veratrine after the method recommended by M. Daniel(?). The patient, a woman under middle age, suffered intense pain in the articulations, high fever with endo-carditis exhibiting itself by a derangement of the first sound at the base of the heart—(sigmoid valves of aorta)—with a souffle prolonged into the large vessels, and accompanied with an alteration in the left ventricle also. In 62 hours she was absolutely cured, leaving not the slightest trace of fibrile excitement, the presence of a slight souffle alone remains. One half of a millegramme (about 1-10th of a grain ?) was given in the form of pill, each day increasing the quantity, and, when the pains were relieved, continuing it in the same dose every second day. Its influence on the circulation in this case was prodigious, to use M. Trousseau's expression; the pulse fell to 42, and when I heard of the patient two days after, it was still at this reduced rate. Veratrine, we are aware, is one of the active principles of colchium, and it is, therefore, not surprising that it should possess some power in acute Rheumatism, more particularly in those dependent upon the arthritic diathesis, gout, etc.

(*Concluded next Month.*)

EDITORIAL.

Minutes of the Third Annual Meeting of the Illinois State Medical Society, Held at Chicago, June, 1853.

June 7th, 1853.

THE Illinois State Medical Society met in the Common Council Room, in the city of Chicago, at 10 A. M.

The President, Dr. ROUSE, being absent, Dr. THOS. HALL, the first Vice-President, took the Chair and called the Society to order.

The Committee of Arrangements, through their Chairman, Dr. MCARTHUR, welcomed to the city the members of the Society, after which, they reported the following list of Delegates from local Societies and Medical Institutions.

Lisi of Delegates.

Cook County Medical Society.	Drs. J. V. Z. BLANEY, DE LASKIE MILLER, J. H. BIRD, ERIAL MCARTHUR, WM. E. CLARK.
Stark County Medical Society,	Drs. WM. CHAMBERLAIN, THOS. HALL.
Rush Medical College,	Drs. DANIEL BRAINARD, JOHN EVANS.
Illinois General Hospital,	Dr. N. S. DAVIS.
U. S. Marine Hospital,	Dr. W. B. HERBICK.
Peoria City Medical Society,	Dr. A. B. CHAMBERS.
Winnebago Co. Med. Society,	Drs. LUCIUS CLARK, WM. LYMAN.
Ogle County Medical Society,	Dr. E. M. LIGHT.
Will County Medical Society,	Dr. A. L. MCARTHUR.
Kane County Medical Society, (*St. Charles,*)	Dr. W. J. NORTON.

After calling the roll of permanent members, the Secretary read a letter of resignation from Dr. H. Shoemaker, he having removed from the State.

On motion of Dr. DAVIS, the resignation was accepted.

Dr. DAVIS then offered the following:

Resolved, That all regular members of the profession, whether residents of the city or visitors from abroad, be invited to take seats with us, during the meetings of the Society, as members by invitation.

The resolution was adopted.

On motion, it was ordered—

That one member from each County represented, be selected to constitute a Committee for the Nomination of Officers.

The Society took a recess of fifteen minutes, to allow the delegations time to select the Committee, which consisted of the following persons:

Drs. JOHN EVANS,	*of Cook County*,	
C. N. ANDREWS,	*Winnebago County*,	
W. W. WELCH,	*Lasalle*	"
A. B. CHAMBERS,	*Peoria*	"
W. CHAMBERLIN,	*Stark*	"
S. W. NOBLE,	*Mc Lean.*	"

The Committee on Nominations reported as Officers for the ensuing year for—

PRESIDENT.

DANIEL BRAINARD, *of Chicago.*

VICE-PRESIDENTS.

C. N. ANDREWS, *of Rockford,*

H. NOBLE, *Mc Lean, Co.*

SECRETARIES.

H. A. JOHNSON, *of Chicago,*

W. W. WELCH, *of Lasalle.*

TREASURER.

A. B. CHAMBERS, *of Peoria.*

The report was accepted, and the Committee discharged.

On motion of Dr. BLANEY, the persons named were unanimously elected Officers for the ensuing year.

On motion, a Committee, consisting of Drs. EVANS and MCARTHUR, was appointed to conduct the President and Vice-Presidents to their chairs.

The President made a short and appropriate address, in reference to the objects of the Society, and the importance of the interests

represented; after which the Society adjourned to meet at 2 o'clock, P. M.

Afternoon Session, 2 P. M.

The Society met, pursuant to adjournment, the President, Dr. BRAINARD, in the Chair.

On motion of Dr. W. O. CHAMBERLIN, it was

Resolved, That every motion shall be made in writing, and handed to the Secretary.

On motion of Dr. E. MCARTHUR, Dr. Geo. Dennig was made a member by invitation.

The reports of Standing Committees being next in order,

The report of Committee on Surgery was called for; the chairman being absent, no report was presented.

The same was the case in regard to the Committee on Practical Medicine.

Dr. Evans, chairman of the Committee on Obstetrics, being temporarily absent,

On motion of Dr. HERRICK, it was ordered that the reading of the report of this committee be deferred till a future period.

The Committee on Drugs and Medicines being called for, on motion of Dr. HERRICK, it was

Resolved, That the Committee have liberty to report hereafter, at such time as the Committee of Arrangement shall designate.

Dr. W. O. CHAMBERLIN moved the following:

Resolved, That our next annual meeting be held at Lasalle.

After a discussion, in which Drs. McArthur, Hall, Welch, Blaney, Chamberlin and Cooper participated, it was adopted.

The following gentlemen were proposed and elected permanent members of the Society:

Dr. JOSEPH P. ROSS,	*of Chicago,*	proposed by Dr. MCARTHUR.
S. W. THOMPSON,	*Albion,*	" "
A. M. CATLIN,	*Rockford,*	" "
W. B. SIMMINGTON,		" A. L. MCARTHUR.
R. F. HENRY,	*Princeville,*	" W. CHAMBERLIN
CHAS. CUTTER,	"	" "
F. D. FITCH,	"	" "
E. PINNEY,	"	" "

Dr. R. McCORMICK,	*of Brimfield,*	*Peoria Co.,*	"	"	Dr. G. L. Corcoran.
" DAVID RUTTER,	*Chicago,*	*Cook Co.,*	"	"	Johnson.
" R. B. RUTTER,	"	"	"	"	Herrick.
" P. B. McKAY,	"	"	"	"	Haven, Brainard.
" J. C. BROWN,	*Lasalle,*	*Lasalle Co.*	"	"	Welch.
" H. C. WATSON,	"	"	"	"	
" JOHN GILLETT	"	"	"	"	
" FRANCIS BAY,	"	"	"	"	
" L. D. BOONE,	*Chicago,*	*Cook Co.*	"	"	Herrick and Davis,
" BROCK McVICKAR,	"	"	"	"	
" J. BLOODGOOD,	"	"	"	"	
" JOHN C. MORFIT,	"	"	"	"	
" CHAS. G. SMITH,	"	"	"	"	
" J. W ELDRIDGE,	"	"	"	"	
" H. PARKER,	"	"	"	"	
" H. R. BELL,	"	"	"	"	
" V. L. HURLBUT,	"	"	"	"	
" MAX MYERS,	"	"	"	"	
" JAS. A. COLLINS,	"	"	"	"	
" R. C. HAMILL,	"	"	"	"	W. E. Clarke.
" WARREN MILLAR,	"	"	"	"	Blaney.
" L. P. CHENEY,	"	"	"	"	McArthur.
" I. P. LYNN,	"	"	"	"	Johnson.
" W. C. HUNT,	"	"	"	"	Davis. Miller.
" C. MARTIN,	*Freeport,*	*Stephenson Co.,*	"	"	L. Clark.

Dr. Blaney moved the following.

Resolved, That all regular members of the medical profession from other States, who may be present in this city during the session, be invited to take seats with the society as members by invitation.

The resolution was adopted.

The appointment of standing committees being next in order, on motion of Dr. Miller it was

Resolved, That a committee of one from each county represented at this meeting be appointed by the President to nominate the standing committees for the ensuing year.

The Committee of Arrangements reported Wednesday evening as the time for hearing the annual address, and that the same be delivered in Tremont Hall at 7½ o'clock. They also recommended that the public be invited to attend.

The report was adopted.

Dr. Davis, in behalf of the medical officers of the Illinois Gen.

Hospital, and Dr. HERRICK, in behalf of the U. S. Marine Hospital, extended an invitation to the society to visit those institutions. The invitations were accepted, and to-morrow (Wednesday) morning from 8 to 10 o'clock designated for that purpose.

Dr. HERRICK moved the following:

Resolved, That a committee of three be appointed by the Chair, whose duty it shall be to report the unfinished business pending since the last meeting of the society.

The resolution was adopted, and Drs. HERRICK, JOHNSON and COOPER appointed that committee.

Dr. THOS. HALL of the Committee on Prize Essays reported that no communications had been received.

On motion of Dr. E. MCARTHUR it was

Resolved, That the report of the Committee on Drugs and Medicines be made the special order of business for to-morrow afternoon at 3 o'clock.

On motion of Dr. HERRICK, it was

Resolved, That, when the society adjourn, it adjourn to meet at this place at 10 o'clock to morrow morning.

On motion the society adjourned.

SECOND DAY.

Wednesday, 10 o'clock, A. M., the Society was called to order by the President.

The minutes were read and approved.

The reading and discussion of voluntary communications being in order, the Committee of Arrangements announced a paper on the medical and surgical diseases of the eye by Dr. E. S. COOPER, of Peoria, which was read and discussed by Drs. HALL and BRAINARD.

The Chair appointed the following members, a Committee for Nominating the Standing Committees for the ensuing year:

Dr. N. S. DAVIS,	*of Cook County*,	
W. W. WELCH,	*Lasalle*	"
A. B. CHAMBERS,	*Peoria*	"
E. M. LIGHT,	*Ogle*	"
A. L. MCARTHUR,	*Will*	"
W. I. NORTON,	*Kane*	"
LUCIUS CLARK,	*Winnebago County*,	
WM. CHAMBERLIN,	*Stark*	"
S. W. NOBLE,	*McLean*	"

Dr. HERRICK presented the following communication:

The undersigned, a Committee in behalf of the Medical Profession of the city of Chicago, invite the members of the profession now visiting our city to an entertainment, to be given at the Tremont House, Thursday evening, at 8 o'clock.

Signed, J. W. ELDRIDGE, W. B. HERRICK, B. McVICAR, D. RUTTER, MAX MYERS, } *Committee.*

June 8th, 1853.

On motion of Dr. WELCH, the invitation was accepted.

On motion of Dr. W. CHAMBERLIN, the Society adjourned to meet at 2½ o'clock. P. M.

Afternoon Session, 2½ P. M.

The Society was called to order by the President.

Dr. BLANEY, chairman of the Committee on Drugs and Medicines, read a report, and, in conclusion, offered the following resolutions:

1. *Resolved*, That the Illinois State Medical Society have learned with much pleasure of the Institution of the National Pharmaceutical Association, and would hereby express a desire and intention, as far as may be, to co-operate with the laudable exertions of that body, in the advancement of pharmaceutical knowledge, and elevation of the professional character of apothecaries and druggists throughout the United States.

2. *Resolved*, That this Society recommend to druggists and apothecaries in Illinois, that, as far as circumstances will admit, they form among themselves pharmaceutical societies, to enable them to act in the most efficient manner as adjuvants to the National Pharmaceutical Association, in the work of elevation and reform of their profession.

3. *Resolved*, That we, the members of the Illinois State Medical Society, will, individually and collectively, exert our utmost influence to procure the more thorough education of apothecaries and druggists in this State; and, as far as practicable, trade only with those whose honesty and knowledge of their business *deserve* our patronage.

4. *Resolved*, That we pledge ourselves not to purchase drugs or medicinal preparations, without rigid scrutiny as to their quality and freedom from sophistication, and invariably refuse to purchase any but the purest and best articles we can obtain.

5. *Resolved*, That the District, County, and City Societies be

recommended to discuss the expediency of adopting the third and fourth resolutions appended to this report.

6. *Resolved*, That the District, County and City Societies be recommended each to appoint one or more members of their respective bodies, examiners of drugs and medicines offered for sale in their respective cities, or districts, and that they require from said examiners a semi-annual report of the condition of the drug market in their respective districts; and that said examiners shall, as early as April 1st, of each year, furnish to the chairman of the Committee of Drugs and Medicines of the Illinois State Medical Society, all important facts which may come to their knowledge in relation to the sophistication and sale of drugs and medicines in the State of Illinois.

7. *Resolved*, That this Society cordially adopt the following two resolutions of the National Pharmaceutical Convention, held at Philadelphia, October 6th, 1852, viz: "*Resolved*, That in the opinion of this Convention, the law against the importation of adulterated drugs, chemicals, and medicinal preparations, has already effected much good, by excluding large quantities of inferior drugs from the market. *Resolved*, That, inasmuch as the usefulness of the law will be proportioned to the ability, and conscientious discharge of duty, of examiners, that this Convention shall respectfully and urgently represent to the appointing power the cardinal importance of preventing the removal of qualified examiners on mere political grounds."

8. *Resolved*, That a committtee of —— be appointed by the Chair to correspond with the National Pharmaceutical Association, and co-operate with that body in carrying into effect the spirit of the last quoted resolution.

All of which is respectfully submitted.

JAMES V. Z. BLANEY, Chairman.

On motion of Dr. PADDOCK, the report was adopted and referred to the Committee of Publication, reserving the resolutions for discussion.

The resolutions were then taken up seriatim, and adopted.

Dr. PADDOCK moved that the blank in the eighth resolution be filled by one.—Carried.

Dr. Blaney was appointed by the Chair, the Committee designated in the last resolution.

On motion of Dr. LYMAN, it was

Resolved, That the chairman of the Committee on Drugs and Medicines be requested to give verbally, as an addition to his report any facts or principles he may be in possession of relating to anesthesia, and the use of chloroform and ether.

On motion of Dr. W. E. CLARKE, it was

Resolved, That Dr. Blaney's communication be made the first order of business to-morrow (Thursday) afternoon.

Dr. MCARTHUR read a communication from Dr. Saml. Thompson, of Albion, on the use of Turpentine.

On motion of Dr. ARNOLD, it was

Resolved, That this valuable communication be received, and referred to the Committee of Publication; and that the thanks of the Society be tendered to Dr. Thompson.

Dr. THOMPSON'S communication also called the attention of the Society to the subject of legislation in regard to the sale of medical compounds and nostrums, and also suggested that this society take some action concerning the conditional granting of degrees by medical colleges.

On motion of Dr. MCARTHUR, it was

Resolved, That a committee of three be appointed by the Chair to take into consideration the two subjects alluded to by Dr. Thompson, and report to the Society to-morrow.

The following gentlemen were appointed that committee:

Dr. E. MCARTHUR, Dr. J. D. ARNOLD,
W. LYMAN.

On motion of Dr. NORTON, it was

Resolved, That the thanks of the Society be tendered to Prof. Davis, and the Trustees of the Illinois General Hospital; and to Prof. Herrick, and the officers of the U. S. Marine Hospital, for their attentions during the visits of the Society to those institutions this morning.

On motion of Dr. MCARTHUR, the Society then adjourned until to-morrow morning, at 9 o'clock.

Wednesday evening, the annual address before the Society, was delivered by Prof. N. S. DAVIS, in Tremont Hall.

The subject, "The Intimate Relation of Medical Science to the whole field of Natural Sciences."

THIRD DAY.

9 o'Clock, A. M.

The Society met, pursuant to adjournment, Vice-President Dr. NOBLE, in the Chair.

Minutes of yesterday's proceedings read and approved.

Dr. Joseph Stout, of Ottawa, was proposed by Dr. WELCH, and elected a permanent member of the Society.

On motion of Dr. ANDREWS, it was

Resolved, That Dr. A. L. McArthur, of Joliet, be appointed to deliver the annual public address before the society, at its next regular meeting.

Dr. WELCH offered the following:

Resolved, That each local society, and the profession generally, throughout the State, be recommended to send petitions to the next legislature, for the passage of laws regulating the practice of medicine.

After some discussion, on motion of Dr. W. CHAMBERLIN, the resolution was laid on the table.

The Committee, to whom were referred the suggestions of Dr. Thompson, in reference to procuring the action of our legislature, in regard to the sale of medical compounds and nostrums; and also in regard to the action of this Society concerning the conditional granting of degrees by medical colleges; although sympathizing with Dr. Thompson in the object desired, nevertheless believe that it is inexpedient for this Society at the present time to take any action on the subject.

In behalf of the Committee,

E. McARTHUR, *Chairman.*

On motion, the report was accepted and the committee discharged.

On motion of Dr. THOS. HALL, it was

Resolved, That the Secretary of each county or local medical society be appointed a Committee of one to report on the most prevalent diseases of his county or district during each medical year, and that he be earnestly requested to forward the same to the Chairman of the Committee on Practical Medicine of this Society, at least one month before the annual meeting.

The Treasurer's report was read by Dr. THOMAS HALL, and, on motion of Dr. E. MCARTHUR, it was

Resolved, That a committee of three be appointed by the Chair to examine the vouchers and report this afternoon; also

That the same Committee report the annual assessment necessary for defraying the expenses of the current year.

Drs. E. McArthur, Arnold and Hall were appointed that committee.

Dr. DAVIS, from the Committee for Nominating the Standing

Committees, made the following report; which, on motion of Dr. LYMAN, was accepted and adopted.

Committee of Arrangements,	Drs. W. W. WELCH, of Lasalle, J. C. BROWN, " H. C. WATSON, "
Committee on Surgery,	Drs. W. B. HERRICK, of Chicago, J. D. ARNOLD, of Peoria, F. A. McNEILL, of Mt. Morris.
Committee on Practical Medicine,	Drs. LUCIUS CLARK, of Rockford, A. M. CATLIN, " S. W. NOBLE, of Leroy.
Committee on Obstetrics,	Drs. THOMAS HALL, of Toulon, W. CHAMBERLIN, " A. B. CHAMBERS, of Peoria,
Committee on Drugs & Medicines,	Drs. DE LASKIE MILLER, Chicago, A. L. McARTHUR, of Joliet, SAML. THOMPSON, of Albion.

Dr. ANDREWS, read a paper on the Development of the Placenta in the Fallopian tubes, with reports of cases.

On motion of Dr. HALL, it was

Resolved, That the thanks of the Society be tendered to Dr. Andrews for his interesting paper; and that the same be referred to the Committee of Publication.

Dr. BRAINARD, in compliance with the request of the Committee of arrangements, read from his case book notes of two cases of obliteration of the vagina; also a case of cartilaginous exostosis of the condyle, ramus and angle of the lower jaw, removed by operation. The morbid specimen was presented for inspection.

Dr. PADDOCK introduced the following, which was adopted:

Resolved, That the thanks of the Society be tendered to Dr. Brainard for his reports, and that he be requested to place them at the disposal of the Committee of Publication.

Dr. EVANS presented the following

Resolved, That the constitution be so amended as to require the Standing Committee on Obstetrics to report upon the improvements and important suggestions in the science and art of obstetrics, and the pathology and treatment of diseases of women and children, that have been made within the state of Illinois during the year, or not previously noticed in the proceedings of this Society.

On motion of Dr. E. McARTHUR, the Society adjourned to meet at 2½ o'clock, P. M.

Afternoon Session, 2½ *P. M.*

The Society met, and was called to order by the President.

The Committee appointed to examine the report of the Treasurer

reported that they had found the same correct, and they recommended an assessment of two dollars on each member, for the purpose of defraying the current expenses of the Society.

The report was accepted and adopted.

In accordance with the request of the Society, Dr. BLANEY proceeded to give his verbal report on the use of anesthetics.

In the discussion of the subject, Drs. Brainard, Blaney, W. O. Chamberlin and Hall participated.

Dr. W. O CHAMBERLIN presented the following, which was adopted:

Resolved, That the thanks of the Society be presented to Dr. Blaney, for his able report, and that he be requested to embody his remarks this afternoon, in connection with his previous report, for publication.

On motion of Dr. THOS. HALL, it was

Resolved, That the subject proposed at the last annual meeting for prize essays be continued another year, and that a committee be now appointed to receive essays and award the premium.

The Committee of last year was continued, substituting Dr. Arnold for Dr. Rouse.

The following members of the society were elected delegates to represent this Society at the next annual meeting of the American Medical Association, to meet in St. Louis, in May next.

Dr. SAMUEL THOMPSON, of Albion,
" H. A. JOHNSON, of Chicago,
" THOS. HALL, of Toulon,
" LUCIUS CLARK, of Rockford.
" NATHANIEL ENGLISH, of Jacksonville,
" A. L. McARTHUR, of Joliet,
" SAMUEL LONG, of Springfield,
" DeLASKIE MILLER, of Chicago,
" EDWIN DICKINSON, of Peoria,
" S. A. PADDOCK, of Princeton,
" J. S. WHITMIRE, of Metamora,
" W. W. WELCH, of Lasalle.

On motion of Dr. EVANS, the delegates were empowered to appoint substitutes in case of their own inability to attend.

Dr. HALL read an interesting paper on mucous diarrhœa and

puerperal fever; he also made some remarks on citric acid in rheumatism, sulph. acid in cholera, with details of other cases.

On motion of Dr. WELCH, it was

Resolved, That the thanks of the Society be tendered to Dr. HALL, and that his communication be referred to the Committee of Publication.

On motion of Dr. EAVNS, it was

Resolved, That the thanks of the Illinois State Medical Society be tendered to the Common Council of the City of Chicago for the use of their council chamber for the sittings of the society during its present session.

On motion of Dr. ANDREWS, it was

Resolved, That the thanks of the Illinois State Medical Society be tendered to the Medical Profession of the City of Chicago for the ample accommodations furnished for the society, and for the kind and liberal hospitality extended towards its members during its present session.

On motion of Dr. L. A. MCARTHUR, the thanks of the society were tendered to Dr. DAVIS for his interesting address, and a copy requested for publication in the transactions.

On motion of Dr. HERRICK, the society adjourned.

North-Western Medical Society.

Agreeable to a call, signed by the physicians of the City of Dubuque, a Meeting was held at the office of Dr. Kirkup in this city on the 4th of November, 1852, preparatory to the organization of a MEDICAL SOCIETY.

Dr. Sprague of Dubuque was called to the chair, and Dr. E. Kirkup appointed Secretary.

A resolution, declaratory of the object of the meeting was adopted, and on motion a Committee of three was appointed by the chair, to draft a constitution and by-laws for the government of said proposed Medical Society.

The following persons were appointed said Committee: Drs G. W. Richards, Asa Horr, and F. C. Smith.

On motion, the meeting adjourned for one week.

Nov. 11.

Assembled, agreeable to adjourment, and in the absence of Dr. Sprague, Dr. J. W. Finley, was called to the chair.

The Committee, appointed to draft a constitution and By Laws, submitted their Report, which on motion was accepted and the Committee discharged.

The Report was, on motion, taken up article by article, read, discussed, and amended, so as to meet the views of a majority present, and then laid upon the table, to be reported to a more general meeting, voted to be held at Dubuque on the second Tuesday of January, 1853.

On motion, the Secretary was authorized to procure printed circulars to be sent to the physicians of this and the surrounding counties, apprizing them of the time and objects of said adjourned meeting, and inviting their co-operation.

On motion, adjourned to meet as above specified.

Tuesday, Jan. 11, 1853.

The meeting assembled at the City Hotel, at the time specified, and was organized by choosing Dr. G. W. Richards, of Dubuque, chairman, and Dr. F. Coleman Smith, Secretary.

The proceedings of the preliminary meetings were read, and on motion, the Constitution and By-Laws referred to in said proceedings, were taken up for the action of this meeting.

Some slight amendments were made, when, on motion, they were unanimously adopted, and are in the following words, to wit:

(APPENDED.)

After the adoption of the Constitution and By-Laws, the meeting resolved itself into a Committee of the whole, for the examination of diplomas, Licences, &c., and reported the following persons as possessing the requisite testimonials, each of whom came forward and subscribed to the Constitution:

G. W. Richards, of Dubuque. Harrison Holt, of Dubuque.
R. S. Lewis, " " F. Coleman Smith, "
Asa Horr, " " John W. Finlay, "
Thos. Scott, " " W. R. McMahan, "
Robt. I. Thomas " " A. E. Smith, Delaware Co.
John F. Ely, Linn County.

The Meeting then proceeded to the permanent organization of the NORTH-WESTERN MEDICAL SOCIETY, by the Election of the following Officers for the ensuing year viz:

President..
G. W. RICHARDS, Dubuque.

1st. V. President. *2d. V. President.*
J. E. ELY, Linn Co. HARRISON HOLT, Dubuque.

Corresponding Sec. *Recording Sec.*
ASA HORR, DUBUQUE, F. COLMAN, SMITH.

Treasurer.
R. S. LEWIS, Dubuque.

Censors.
G. W. RICHARDS, ASA HORR, J. F. ELY.

After a brief but appropriate address from the President, the Society adjourned to meet at the office of Dr. Smith, to-morrow morning at 9 o'clock.

Wednesday Morning, Jan. 12.

The Society met according to adjournment, and was called to order by the President.

On motion, resolved, that when we adjourn it be to meet in this city, on the first Tuesday, of June next, at 3 o'clock P. M.

The President announced the following persons, as appointed to read Essays before the Society at its next meeting, viz:—Dr. John F. Ely, of Cedar Rapids, and Dr. G. D. Wilbur, Mineral Point, Wis.

On motion, a Committee was raised to report at the Annual Meeting, on the 1st Tuesday of Jan. next, on the Medical Topography of this section of country. The Committee consists of Drs. Asa Horr and Harrison Holt, of Dubuque, and Dr. A. E Smith, of Delaware County.

On motion, a Committee was raised to report at the meeting in June next, on Endemic Diseases. The following persons compose this committee.—Drs. Richards, of Dubuque; Newhall, of Galena; Van Dusen, of Mineral Point; Andros, of Garnavillo; Smith, of Hopkinton; and Ely, of Cedar Rapids.

On motion of Dr. Horr, the Code of Medical Ethics, of the National Medical Society, was adopted as the Code of this Society.

(APPENDED.)

On motion, Dr. Harrison Holt, of Dubuque, was appointed Delegate to the National Medical Society, to be holden at New York city on the 3d day of May next.

On motion, a Committee was appointed to report the form of a Seal and Diploma for the Society. The President appointed Drs. Lewis, Finlay and Thomas, said Committee.

On motion, ordered, that the proceedings of the meeting, together with the Constitution and By-Laws, and the Code of Ethics, be published in pamphlet form, and that a synopsis of the same be furnished to the publishers of the Western Medico-Chirurgical Journal at Keokuk, and the North-Western Medical Journal, at Chicago, with a request that they publish the same.

Adjourned to meet at Dubuque, on the first Tuesday, of June next.

G. W. RICHARDS, President.

F. COLEMAN SMITH, Rec. Sec.